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Saving in India

A Monograph

National Council of Applied Economic Research
New Delhi

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PREFACE

THE DEPENDENCE OF economic development upon an adequate level and composition of saving hardly requires elaboration. Unfortunately, economic planning in India has had to cope with lack of knowledge on how much is saved, who does the saving, what form the saving takes and the motivating forces for such saving in our economy.

The National Council of Applied Economic Research addressed itself to filling this major gap in our economic intelligence and providing comprehensive data on savings for different sectors in the Indian economy as early as 1958. The Council adopted two different prongs to the study: a survey approach which would provide distributional and motivational data for the Individuals' sector which forms, of course, the single most important sector in the economy and an aggregate approach which would provide the most reliable estimates of saving for the economy as a whole.

The National Council conducted a pilot survey of Urban Saving in Delhi in 1959 and developed appropriate methods and techniques for a large scale survey. The all-India Urban Saving Survey was started in April 1960 and a preliminary report on the findings is expected very soon. A pilot rural survey is already in the field with a view to appraising the magnitude and forms of saving that originate in the rural sector and an all-India survey will be undertaken.

The aggregate approach which the National Council adopted to arrive at the best possible estimates of saving in India involved the systematic collection, processing and analysis of the data available in a wide variety of sources which could give an overall picture of the magnitude and pattern of saving for the three major sectors, namely, Individuals, Corporations and Government. There exist at least three independent methods to arrive at aggregate estimates of saving from the totality of all the data available. The first method arrives at a measure of saving by adding net foreign investment to total domestic investment where both the estimates are independently made from aggregate investment data. This method known as the *investment method* is based upon the fact that at the aggregate level saving and investment must be equal. The second method attempts to derive saving by subtracting consumption expenditures

from disposable income. The estimates of disposable income are usually derived from national income statistics while data on consumption are built up from available statistics on consumption expenditures. This method is sometimes called the *product method*. The third method known as the *institutional method* presents estimates of saving derived independently from a wide variety of institutional data. It not only provides a measure of aggregate saving in the economy but also yields useful information about the composition of saving.

The National Council used all the three methods to derive saving estimates presented in this volume but the second one is used only for purposes of checking. The indirect estimates of saving based on the investment method are somewhat higher than the direct estimates based on the institutional method which suggests that further research might help narrow down the differences.

Estimates of saving have been made previously by some individuals working on the subject. More recently, the Reserve Bank of India has done considerable work in the field. The estimates derived by the National Council adopting different methods contain elements which distinguish them from the estimates that have been attempted so far. The techniques adopted for estimating Individuals' gross investment in different assets for the earlier years (preceding the period 1948-49) and those used for calculating depreciation allowances in order to arrive at the net value of current investment and the corresponding net saving deserve to be mentioned in particular.

The National Council also undertook a detailed analysis of financial statements of different categories of corporations, particularly for the small company sector to arrive at better estimates of Corporate saving. An important refinement of this study is in regard to the corporate inventory valuation adjustment which helps eliminate capital gains and losses resulting from changes in prices of inventories for the measurement of saving. Further the National Council analysed the financial statements of almost all the Government companies registered under the Indian Companies Act and derived their saving and investment estimates, thus making the Government sector estimates more comprehensive.

This volume presents the findings of the National Council's study of saving through the aggregate approach for the period 1948-49 to 1957-58. An earlier version of this study appeared in the form of a paper on 'Saving in India' presented by me to the American Statistical Association

in December 1959[1] The National Council has utilized all the available information in published and unpublished sources in building up the present saving estimates and it is believed that the saving data presented here are about the most reliable estimates possible in the context of our present statistical knowledge and availability of data

The findings that emerge from this comprehensive study suggest that saving in India has increased substantially from about Rs 3,200 millions in 1948-49 to Rs 12,100 millions in 1957-58 The relative shares of the three major sectors, *viz*, Government, Corporations and Individuals accounted for about 15 per cent, 5 per cent and 80 per cent respectively The study reveals that direct saving by Individuals in physical assets has declined somewhat during the period 1948-49 to 1957-58, which suggests that Individuals' saving are channelled more and more into the other sectors for productive investment The average saving-income ratio which stood at about 6 per cent during the period 1948-51 went up to 8 per cent during the First Five Year Plan period and further increased to 10 per cent during the first two years of the Second Plan

The marginal propensity to save in India appears to be as high as in many advanced countries and, in fact, is higher than suggested by previous studies Over the past decade it seems to have been of the order of 20 per cent which, if continued, augurs well for the future growth and health of the Indian economy This is particularly true if some changes can be made in the composition of saving Though the estimates presented in this study are believed to be reasonable, they are unavoidably subject to a considerable margin of error and so should be used with caution

The National Council has a long-term plan to continuously check and improve the saving estimates through further work on aggregate study and the rural and urban survey programmes The Rural Saving Survey, in particular, is expected to throw light on saving in the much larger area of the non-monetized sector of the economy about which our present knowledge is, of course, very poor

The National Council received very valuable cooperation in the collection of both published and unpublished data from various organizations including the Reserve Bank of India, Department of Company Law Administration, Central Statistical Organisation, Office of the Commis-

[1] P S Lokanathan, "Saving in India"—*The American Statistical Association*, 1959, Washington D C

sioner for Employees' Provident Fund, Office of the Controller of Insurance, etc to all of whom the Council is very much indebted

The project was under the immediate charge of Dr J Satyanarayana, senior economist of the Council who worked under the guidance and direction of the Director-General Mr M V Chari and Mr S D Khosla assisted in the study

The project from its initial stages was developed with the most valuable guidance provided by Prof Irwin Friend of the University of Pennsylvania, Philadelphia, U S A who is a well known international authority on saving studies I wish to place on record my sincere thanks to Prof Friend

NEW DELHI
March 1961

P S LOKANATHAN
Director-General

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PART I

CHAPTER 1

INTRODUCTION

THE IMPORTANCE OF a study of saving covering the sources of funds for capital formation in a developing economy like India hardly needs any elaboration. It is the act or process of saving which, regardless of the form it takes, directly or indirectly finances or makes possible economic investment. Not all investment is wise or desirable, but investment, as a whole, is the *sine qua non* of economic development. A nation's saving and investment propensities also play a central role in economic stabilization or in the degree of utilization of existing economic resources. While full utilization of existing resources is frequently given a second order of importance to rapid development as the primary economic goal in underdeveloped economies, the two goals are, of course, inter-related. Thus in taking measures to increase saving propensities, care must be taken not to reduce the combined public and private investment propensities if the total of realized saving or investment is to be raised.

The National Council of Applied Economic Research undertook a comprehensive study of Saving in India in the fall of 1958 employing a number of different approaches. The primary objective of this study is to arrive at the best possible estimates of saving that originate in different sectors of the economy, identify the components of saving for each sector and investigate the pattern of their utilization. For the purpose of this study, the economy is divided into three major sectors, viz., Individuals, Corporations and Government. The project has attempted to analyse all available data on saving and investment in India and to supplement them wherever necessary and feasible with the collection of new information. In addition to the aggregate estimates of saving provided in this volume the National Council has also taken steps to check and supplement these estimates with detailed data on Individuals' saving derived from urban and rural household surveys, including a substantial amount of new distributional and motivational information. The urban survey covering saving in 1959 has just been completed and the rural survey covering saving in 1960 (and perhaps in 1961) has just been initiated.

While the National Council's estimates of aggregate saving presented in this volume are believed to be the most comprehensive and reliable and represent a substantial improvement on the data previously available, these estimates are still subject to a number of significant deficiencies which will be discussed subsequently. The collection, analysis and systematic presentation of the basic statistics attempted in a comprehensive manner in this study facilitate comparison and reconciliation of the various estimates of saving and investment made by other research bodies and individuals within and outside the Government.[1] The study throws light on the statistical limitations of the available data and helps determine how far even the best possible estimates fall short of the basic conceptual and statistical requirements. The investigation also aims to determine the relationship between saving and income and other related aggregates for different sectors of the economy and to evaluate the corresponding average and marginal propensities to save. It seeks to appraise the saving behaviour of the Indian economy with a view to indicating broadly the likely trend in the volume and composition of saving which may be useful as guidelines for future economic planning. At a later stage of the National Council's investigation it is hoped to provide useful insights into ways of influencing the total and form of saving in desired directions.

The monograph is divided into two parts. The first part deals with the basic conceptual problems encountered in the study and the final order of magnitudes of saving and investment of different sectors of the economy indicating their saving behaviour and role in generating capital formation. The second part discusses in detail the actual methods of estimation used in this study and appraises briefly the various sets of estimates of saving and investment available at present with a view to attempting reconciliation among them. It also attempts to present the basic statistical data in a concise and systematic manner together with all the supporting tables for the estimation of saving and investment.

[1] (i) K. V. R. Avadhani, A. K. Ghosh, R. M. Honavar and M. L. Trikha, 'Savings in the Indian Union, 1949-50 to 1954-55', *Papers on National Income and Allied Topics*, Vol. I, Indian Conference on Research in National Income, 1960.

(ii) V. V. Bhatt, "Savings and Capital Formation", *Economic Development and Cultural Change*, Chicago, April 1959.

(iii) 'Estimates of Saving in the Indian Economy', *Reserve Bank of India Bulletin*, Bombay, March 1960.

CONCEPTS AND DEFINITIONS

Saving

The saving of an economic unit is defined as the *net change in earned surplus* or as the *change in earned net worth* during a given period. Saving can be measured either from the current account or the balance sheet. In the case of the current account it is measured as the difference between current income of the economic unit and its current expenditure including taxes and capital consumption allowances. This measure of saving corresponds to the change in earned surplus. Saving is also equivalent to the net change in assets and liabilities of all economic units during a period of time, exclusive of all gains or losses from revaluation of assets or from capital transfers. These balance sheet changes when netted out appear as change in earned net worth which corresponds to earned surplus in the current account.

In principle, the net change in earned surplus is equal to change in earned net worth and saving as measured from the current account and balance sheet will not differ from each other provided (i) both exclude all valuation changes in an identical manner, (ii) both make the same distinction between current expenditures which do not appear in the balance sheet and capital expenditures which do, and (iii) both follow the same method of adjustment for accruals and transfer items.

It may be noted that, as is customary in such analysis, saving includes net investment in capital goods and in financial claims but not in *human* capital or in research.

Investment

Investment in the economic sense is defined as *net additions to capital stock* during a given period. In other words, it includes the acquisition of all types of newly produced capital goods such as buildings, plant and machinery and other equipment and changes in the total volume of business inventories but excludes financial investment as in securities or other claims such as bank deposits, pension and insurance funds. Economic investment adds directly to product or income whereas financial investment or the acquisition of used capital goods or non-reproducible assets such as land does not.

Investment can be measured through the balance sheet or the asset account of an economic unit which shows the gross or net acquisition of

capital goods The sum total of investment items for different economic units provides an estimate of national investment Another estimate of national investment can be derived from the production of capital goods suitably adjusted for distributive costs, inventory changes, net exports etc, but this approach does not provide a breakdown for different economic units In general, while estimating investment of an economic unit and national investment as a whole, the same treatment is given to capital consumption allowances, transfer items and capital gains and losses as in estimating saving

Saver Groups

Saving (or investment) when aggregated for all units belonging to a specific group or the nation as a whole gives a measure of total saving (or total investment) corresponding to the group or the nation The saving (or investment) of a single individual or a household, though very important in determining the economic welfare of the individual or the household, possesses little economic significance at the aggregative level Aggregation at some level or other is, therefore necessary for a proper economic analysis of the saving behaviour of the economy in generating capital formation However, the grouping of economic entities should not be stretched to such an extent as to make it lose its economic significance for behavioural analysis A proper balance needs to be struck and the economic unit defined in such a way as to lend itself to a comprehensive and meaningful treatment of saving behaviour and saving motivation To some extent, of course, ability to isolate large but relatively homogeneous subgroups of the population for satisfactory analysis may be limited by availability of data The breakdown of economic sectors in this study—into Individuals, Corporations and Government—is the minimum (and perhaps even less than minimum) desirable for analytical purposes but the maximum permitted by data availability

Consumer Durables

An important conceptual issue that arises while measuring saving (or investment) is the treatment of consumer durables which are sometimes treated as capital expenditure and hence as saving and investment, and sometimes as current expenditure and hence as consumption These items are not normally considered to help the generation of income in the same sense as other capital goods For this reason, they are not ordinarily

treated as capital expenditures On the other hand such assets are not completely consumed (or utilized) within a typical accounting period Hence, there exists some difference of opinion among economists on the appropriate treatment of such goods in saving studies[1] For the purpose of this study, it was decided to consider consumer durable goods as part of saving, but because of paucity of data only automobiles, trucks and other transport equipment are included in the estimates of saving and investment In India, the treatment of consumer durables is of course not so significant statistically as in more developed economies

Different Concepts

There exist different concepts of saving (or investment) which could broadly be grouped into three distinct categories (a) the social accounting concept, (b) the business accounting concept, and (c) the cash-flow concept[2]

The social accounting concept of saving attempts to come as close as possible to changes in real stock of assets whose economic services extend beyond an accounting period It eliminates all types of capital gains and losses whether realized or unrealized from the measurement of saving According to this concept, saving is measured on an accrual basis rather than on a cash basis and capital consumption allowances are calculated on the basis of replacement cost rather than on original cost

The business accounting concept of saving accepts all realized and unrealized (but reflected in accounting books) capital gains and losses as a part of current transactions and is based on an accrual basis rather than on cash accounting It usually allows for depreciation on an original cost rather than on a replacement cost basis

The cash-flow concept of saving is much simpler than the other two This disregards all types of capital consumption allowances as well as accruals and valuation changes in measurement of saving This is a gross concept of saving and is particularly useful in the study of flow of funds between different sectors of the economy.

To the extent possible, the social accounting concept has been used though, as will be seen, a number of departures have been necessary All

[1] For a complete discussion of the pros and cons for treating consumer durables as part of saving, *see* Irwin Friend and Robert Jones "The Concept of Saving", *Consumption and Saving*, Vol II, University of Pennsylvania 1960

[2] For a detailed discussion of these concepts, *see* R W Goldsmith *Study of Saving in the United States*, Vol I, Princeton, 1955.

the concepts of saving have been employed in this study to some extent

Some Conceptual Problems

Capital Consumption Allowances

The treatment of capital consumption allowances in saving studies deserves particular mention While gross saving has analytical utility for some purposes, net saving is the more economically meaningful and useful concept Depreciation is an estimate of the current wear and tear of machinery, buildings and production equipment, and saving (which is retained earnings) must be measured net of such costs Depreciation may be determined either on the basis of original cost or on the basis of replacement cost The social accounting procedure suggests that depreciation must be measured in current prices just like all other costs including materials valued at current prices In the usual business practice, the original cost of an asset is recovered in equal instalments over its life time This practice assumes that the use of an asset is equally spread throughout its period of useful life However it is conceivable that an asset may be used more in the beginning and less in the subsequent periods This might imply calculation of depreciation on the basis of diminishing balances or a variant of it More important in practice the recovery of original cost may considerably under-state the actual replacement cost of depreciated capital goods in a period of significantly rising prices

Capital Gains and Losses

Another conceptual problem is the treatment of capital gains and losses which result from changes in prices and consequent changes in value of fixed assets and inventories owned by business firms individuals and Government Capital gains and losses are of two types realized and unrealized Capital gains and losses are a feature of business which occur most commonly through changes in prices of inventories held by business Realized capital gains and losses also result from sale of assets In either case, they should not be considered as a part of current income and should not be reflected in saving and investment The necessity of eliminating capital gains or losses on inventories is of particular importance since relatively small changes in prices may be associated with large inventory profits or losses

Scope of the Study

Geographical Coverage

The estimates of saving and investment made in this study relate to the Indian Union including Jammu and Kashmir and Andaman and Nicobar Islands The coverage is thus co-extensive with the political boundaries of the country

Period Covered by the Study

The accounting period adopted for the purpose of estimating saving and investment in this study relates uniformly to financial years ending in March It also corresponds to the national accounting period as used by the National Income Unit, Planning Commission and other Government Organizations dealing with national aggregates In cases where the basic data are available for accounting periods other than financial years, appropriate adjustments are made to convert such data to financial years The annual estimates of saving and investment cover the period 1948-49 through 1957-58 which forms the first decade of the political independence of the country The study thus covers three years preceding the First Five Year Plan, the entire First Plan period and two years of the Second Plan

Classification of Sectors

For the purpose of this monograph, the entire economy is divided into three major sectors, namely, Individuals, Corporations and Government The sector "Individuals" is in fact a non-Corporate non-Government sector and includes unincorporated business enterprises and non-profit organizations as well as other individuals It would be desirable for analytical purposes to separate out non-farm unincorporated business, farmers and non-profit organizations but it is not possible to do this from aggregate data except for specific business assets and even that at too great a cost in terms of reliability

Measurement

In this study both the balance sheet and current account methods are adopted wherever applicable to estimate saving and investment An

attempt is also made to derive estimates of saving and investment, based on different concepts, for each of the sectors in the economy

Where feasible alternative sets of saving and investment estimates are derived, particularly for the Individuals sector and the nation as a whole National saving is derived from the 'Investment Method" by adding net foreign investment (measured from current account) to total domestic investment as well as by aggregating saving of different sectors of the economy Again, Individuals' saving is derived in two different ways The first approach measures Individuals' saving as a residual after deducting from total National saving the saving attributed to Corporate and Government sectors, the second approach attempts to estimate Individuals saving from aggregate data on Individuals' physical investment and components of financial saving The second method may be termed the "Institutional Approach" since it depends on data on Individuals saving in the form of currency, bank deposits, provident funds life insurance, securities etc, available from a wide variety of different institutional sources The National Council estimated Individuals' saving by components from published and unpublished data made available by the courtesy of the Reserve Bank of India, Company Law Administration, Controller of Insurance and Life Insurance Corporation, Employees' Provident Fund Commissioner and others

In both approaches Individuals' physical investment is largely estimated from identical sources so that, to this extent, the two estimates of saving are not completely independent Individuals' gross physical investment is estimated from data available in National Sample Surveys, Rural Credit Surveys, Census of Manufactures etc, while depreciation on such investment is estimated by the National Council applying appropriate methods as described in Part II It may be noted that a third approach to estimating Individuals' saving, by deducting estimated consumption based on product data from personal disposable income could be made only to a limited extent for checking purposes

Corporate saving is derived from current income and current expenditure including capital consumption allowances while Corporate investment is estimated from an analysis of corporate balance sheets on a sample basis Separate estimates of saving and investment are made for different types and for different size groups of corporations based on the National Council's analysis of financial statements of samples of such companies together with data for large corporations derived from sample analysis of company finances made by the Reserve Bank of India

Government saving and investment are estimated from current and

capital accounts of administrative departments and departmental commercial enterprises as given by the Central Statistical Organisation Saving and investment of statutory autonomous corporations are derived by the National Council from the financial statements of such corporations The estimates for Government corporations (companies registered under the Indian Companies Act) are prepared by the National Council by analysing the income and expenditure accounts and balance sheets of all Government companies The estimates of saving for different sectors in constant prices (1952-53 prices) are given in Tables 1 1 to 1 4[1]

SUMMARY OF FINDINGS

To summarize briefly some of the major results, the national average saving-income ratio in India increased from 6 per cent in 1948-49 to 1950-51 before the First Plan to about 9 to 10 per cent in 1956-57 and 1957-58, the first two years of the Second Plan, and the marginal annual saving-income ratio appears to be in the neighbourhood of 20 per cent which is significantly higher than the estimate made last year by the Reserve Bank of India[2] The recent average saving-income ratio of 9 to 10 per cent, which can be more readily compared with corresponding ratios in other countries than the marginal ratio, seems not too different from the average for many other countries including the United States though there are some countries such as Japan and West Germany where the ratio is notably higher

The national saving-income ratio can of course be expressed as the sum of three products—the product of the ratio of Individuals' saving to Individuals' disposable income times the ratio of such income to the national income, and corresponding products for the Corporate and Government sectors The personal or Individuals' saving-income ratio (including farm and non-farm unincorporated business) increased from 5 per cent in 1948-49 to 1950-51 to 8 to 9 per cent in 1956-57 and 1957-58 The Corporate saving-income ratio varied with no clear trend around an average of 30 per cent (39 per cent before *inventory valuation adjustment*) while the Government saving-income ratio rose from 7 per cent to 10 per cent The Corporate average saving-income ratio was much higher than, while the Government average saving-income ratio was not much different

[1] See also Chart 1 1

[2] Estimated at 7 4 per cent in the *Reserve Bank of India Bulletin*, March 1960 However, this figure seems too low even on the basis of the Reserve Bank series

TABLE 11

AN INDIRECT ESTIMATE OF NET INVESTMENT AND SAVING IN INDIA, 1948-49 TO 1957-58

(In 1952-53 prices)

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Domestic investment	*6031*	*6657*	*5841*	*6806*	*6637*	*6849*	*9575*	*12486*	*13841*	*16269*
1 Government	1702	2073	2035	2112	2460	2738	3813	5360	6158	7893
2 Corporations[a]	1466[b]	1525	758	1543	820	476	1402	1850	2245	2418
3 Individuals	2863	3059	3048	3151	3357	3635	4360	5276	5438	5958
II Net foreign investment of India[c]	*—2675*	*—564*	*222*	*—1938*	*230*	*331*	*—214*	*—72*	*—3187*	*—4241*
III National saving (I+II)	*3356*	*6093*	*6063*	*4868*	*6867*	*7180*	*9361*	*12414*	*10654*	*12028*
1 Government	—269	1021	1320	1995	959	811	1064	1234	1685	1408
2 Corporations after inventory valuation adjustment	N A	—126	154	186	603	309	581	353	45	206
(i) Inventory valuation adjustment	N A	—286	—215	—227	402	23	134	—245	—444	—75
(ii) Before inventory valuation adjustment	406	160	369	413	201	286	417	598	489	281
3 Individuals [III—(1+2)]	4188[b]	5198	4589	2687	5305	6060	7716	10527	8924	10414

IV. National income	*90600*	*92200*	*92600*	*95200*	*98200*	*104900*	*106900*	*109200*	*114600*	*113200*
1 Current receipts of Government	10325	10736	11059	12244	12020	12262	14561	15711	17558	18282
2 Corporate income after taxes[d]	822	556	829	929	708	841	1145	1376	1214	999
3 Individuals' disposable income	88840	90362	90781	92944	96644	103270	104870	106222	112586	111275

[a] Includes investment of foreign branches
[b] Rough estimate
[c] A surplus of exports (+) over imports (−) of goods and services etc
[d] Before inventory valuation adjustment
N A =Not available

Note Inventory profit or loss must be added to saving, investment or income before inventory valuation adjustment to arrive at the corresponding saving, investment or income data after inventory valuation adjustment A minus sign (−) before inventory valuation adjustment indicates an inventory profit while a plus sign (+) indicates an inventory loss

TABLE 1.2

AN INDIRECT ESTIMATE OF GROSS INVESTMENT AND SAVING IN INDIA, 1948-49 TO 1957-58

(In 1952-53 prices)

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Domestic investment*	*11460*	*12274*	*10987*	*12498*	*12630*	*12854*	*16728*	*19772*	*20776*	*22995*
1 Government	2104	2651	2558	2728	3205	3479	4744	6305	7153	9170
2 Corporations[a]	2094[b]	2133	1048	2221	1345	871	2060	2532	2761	3100
3 Individuals	7262	7490	7381	7519	8080	8504	9924	10935	10362	10725
II *National saving*	*8785*	*11710*	*11209*	*10560*	*12860*	*13185*	*16514*	*19700*	*17589*	*18754*
1 Government	133	1599	1842	2611	1704	1554	1994	2178	2651	2685
2 Corporations after inventory valuation adjustment	N A	182	445	862	1128	705	1240	1034	559	889
(i) Inventory valuation adjustment	N A	—286	—215	—227	402	23	134	—245	—444	—75
(ii) Before inventory valuation adjustment	N A	768	660	1039	726	682	1106	1279	1003	964
3 Individuals [II—(1+2)]	N A	9629	8922	7087	10028	10926	13280	16485	14379	15180

[a] Includes investment of foreign branches

[b] Rough estimate.

N A —Not available

TABLE 13

A DIRECT ESTIMATE OF NET SAVING IN INDIA, 1948-49 to 1957-58

(In 1952-53 prices)

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Government saving	—269	1021	1320	1995	959	811	1064	1234	1685	1408
II Corporate saving after inventory valuation adjustment	*N A*	*—126*	*154*	*186*	*603*	*309*	*581*	*353*	*45*	*206*
1 Inventory valuation adjustment	N A	—286	—215	—227	402	23	134	—245	—444	—75
2 Before inventory valuation adjustment	406	160	369	413	201	286	447	598	489	281
III Individuals' saving	N A	3565	4654	2828	4831	5055	6525	9676	7678	9020
IV. National saving (I+II+III)	N A	4460	6128	5009	6393	6175	8170	11263	9408	10634

N A =Not available

TABLE 14

A DIRECT ESTIMATE OF GROSS SAVING IN INDIA, 1948-49 to 1957-58

(In 1952-53 prices)

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Government saving*	133	1599	1842	2611	1704	1554	1994	2178	2681	2685
II *Corporate saving after inventory valuation adjustment*	*N A*	*482*	*445*	*862*	*1128*	*705*	*1240*	*1034*	*559*	*589*
1 Inventory valuation adjustment	N A	—286	—215	227	402	23	134	—245	—444	—75
2 Before inventory valuation adjustment	N A	768	660	1089	726	652	1106	1279	1003	664
III *Individuals' saving*	N A	7996	8987	7226	9554	9924	12089	15337	12102	13756
IV *National saving (I+II+III)*	N A.	10077	11274	10699	12386	12183	15323	18549	15342	17030

N A = Not available

from, the personal sector—results which conform fairly closely with findings in other countries The Corporate marginal saving-income ratio was also higher than the corresponding ratio for Individuals but the reverse seemed true for the Government marginal saving-income ratio As a consequence, the rise in Government income as a proportion of the national *income probably served to curtail slightly the advance in the National* saving-income ratio However, corporations have never played a substantial role in the Indian economy or in the saving total as they have in other countries, accounting for only 2 to 3 per cent of National saving in the 1948-49 to 1957-58 period, with Individuals and Government accounting for roughly 81 to 82 per cent and 16 per cent respectively The share of the Government actually seemed to decline somewhat over this period

The Individuals' saving-income ratio in India compares more favourably with other countries than the National saving-income ratio The National saving-income ratio has been depressed relative to the situation in many other countries by a smaller Corporate sector (though the unincorporated business sector may compensate to a considerable extent) and by a smaller Government saving-income ratio

It would be beyond the scope of this brief summary to review the major findings relating not only to the total saving of the major economic groups but also to the trends over the past decade in the components or forms of saving in India or to the composition of saving in India as compared with other countries

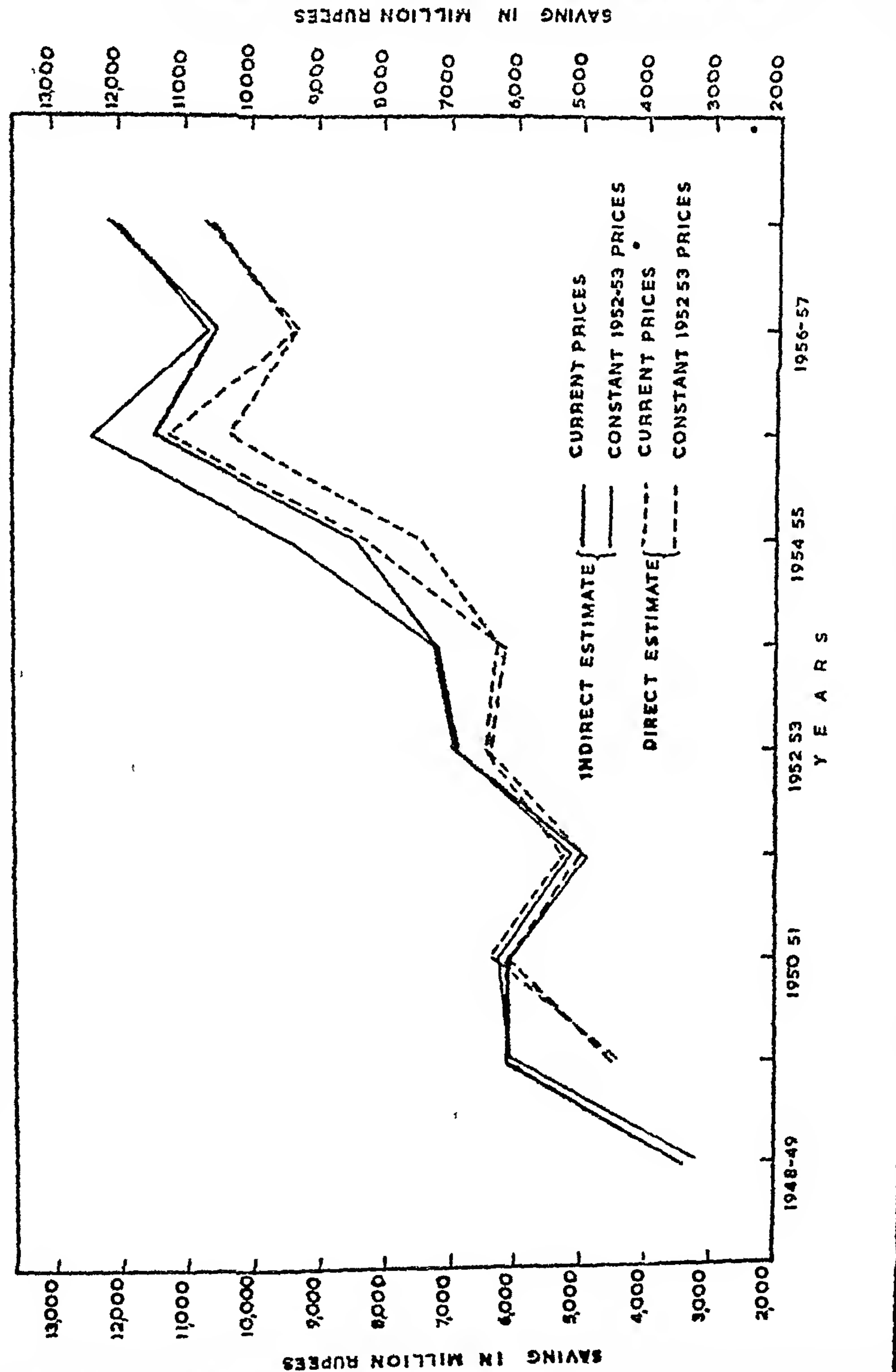
This summary would not be complete, however, without explicit recognition of the major limitations of the estimates made and of the resulting analysis The principal statistical limitations lie in the tentative nature and the large margin of error in the estimates of first, gross investment in capital goods by the Individuals' sector (including farm and non-farm unincorporated enterprises) and, second, depreciation on such goods Indeed two significant components of gross investment had to be omitted, viz, investment in all types of capital goods by non-corporate trading concerns and investment in inventories by farm households and unregistered non-corporate bodies In addition, only a small amount of imputed saving (reflecting non-paid labour) is reflected in the estimates, though this is a more serious problem in gross than in net saving or investment

Apart from data deficiencies, the principal limitation in the analysis arises from the short-time span for which data are available so that the estimates of the marginal propensity to save are subject to a substantial margin of uncertainty This study attempts to make the best estimates possible at the present stage of development of the basic statistics but also

emphasizes the inescapable limitations of the data and analysis. It may be pointed out that in the near future the National Council hopes to have independent estimates of the marginal propensity to save from survey data which will serve as a check on the estimates obtained from the aggregate data presented in this volume.

CHART II

NET NATIONAL SAVING IN INDIA, 1948-49 TO 1957-58.



CHAPTER 2

NATIONAL SAVING

AGGREGATE SAVING (or investment) of the economy is defined as the sum total of saving (or investment) of different economic units. For the purpose of this study, as noted earlier, the entire economy is divided into three sectors (i) Individuals, (ii) Corporations, and (iii) Government. This three-fold classification is considered as the most detailed breakdown which is feasible in view of the various practical limitations including the non-availability of detailed statistical information separating business from personal accounts in the Individuals' sector. The three sectors distinguish quite different economic groups, and this classification is expected to facilitate an appraisal of the saving behaviour and to some extent motives for saving of the major saver groups.

It is essential to make a distinction in regard to nationality of the savers and their location while aggregating the sectoral estimates of saving (or investment) at the national level. The domestic and foreign components in saving (or investment) of all sectors must be segregated in order to arrive at the aggregate estimates for the nation as a whole. The relationship between different types of aggregate saving (or investment) with respect to their foreign components are summarized below.

Classification of Aggregate Saving

Saving of Indian nationals (including Corporations and Government) in the form of

(a) Assets held in India

(b) Assets held abroad

(a) +(b)=Domestic Saving

Classification of Aggregate Investment

1 Investment in India by

(a) Indian nationals

(b) Foreign nationals

(a) + (b) = Domestic Investment

2 Net foreign investment by Indian nationals

= Net financial investment of Indians abroad minus net financial investment by foreigners in India

Domestic investment plus net foreign investment are of course equal to domestic saving Efforts are made in this study to segregate national and foreign components of saving and investment of different sectors of the economy

ALTERNATIVE ESTIMATES

The saving of an economic unit, by definition, is related to the corresponding investment, although the two need not necessarily be equal Investment may within a unit, partly or wholly, be financed by its saving or through external resources or both This phenomenon, although it appears to be complicated for a single economic unit such as Government, Corporations or Individuals, becomes much simpler when saving and investment are aggregated for the entire nation In a closed economy both are equal since the total of changes in financial assets of all economic units must be equal to the total of changes in financial liabilities (including equities) and only physical investment remains as saving for the nation For an open economy, i e, one having transactions with the rest of the world, total national or domestic saving can be derived from total national or domestic investment respectively and *vice versa* by allowing for net foreign investment The estimates thus obtained provide a measure of saving or investment for the country

Total domestic investment, as already mentioned, comprises all types of reproducible domestic tangible assets Attempts are made in this study to estimate each separately on a sectoral basis for Individuals, Corporations and Government

The changes in foreign balances are estimated by the National Council from different sources The balance of payments statistics published by the Reserve Bank of India relate only to transactions that pass through its exchange control department Profits retained in business by foreign branches and foreign controlled companies and foreign investment in kind are not shown in the balance of payments statistics The hoards of gold smuggled from Persian Gulf ports and sold in India do not find an entry in published balance of payments data although they should be treated as capital outflows for purposes of estimating net change in

TABLE 21

AN INDIRECT ESTIMATE OF NET INVESTMENT AND SAVING IN INDIA, 1948-49 to 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Domestic investment*	*5739*	*6504*	*6010*	*7126*	*6637*	*6842*	*8608*	*11412*	*13661*	*16383*
1 Government	1625	2025	2094	2211	2460	2735	3128	4899	6078	7948
2 Corporations[a]	1400[b]	1490	780	1616	820	475	1260	1691	2216	2435
3 Individuals	2734	2989	3136	3299	3357	3631	3920	4822	5367	6000[b]
II *Net foreign investment of India*[c]	*—2555*	*—551*	*228*	*—2029*	*230*	*331*	*—192*	*—66*	*—3146*	*—4271*
III *National saving (I+II)*	*3204*	*5953*	*6238*	*5097*	*6867*	*7173*	*8416*	*11316*	*10515*	*12112*
1 Government	—257	998	1358	2089	959	810	957	1128	1663	1418
2 Corporations after inventory valuation adjustment	N A	— 123	158	194	603	309	522	322	44	207
(i) Inventory valuation adjustment	N A	— 279	—222	—238	402	23	120	—225	—439	—76
(ii) Before inventory adjustment valuation	388	156	380	432	201	286	402	547	483	283
3 Individuals [III—(1+2)]	4000[b]	5078	4722	2814	5305	6051	6937	9896	8808	10487
IV *National income*	*86500*	*90100*	*95300*	*99700*	*98200*	*104900*	*96100*	*99800*	*113100*	*111000*
1 Current receipts of Government	9860	10490	11380	12820	12020	12250	13090	14360	17330	18110

2 Corporate income after taxes[d]	785	543	853	973	708	840	1029	1258	1198	1006
3 Individuals' disposable income	84842	88284	93414	97312	96644	103167	94278	97087	111122	112054

[a] Includes investment of foreign branches
[b] Rough estimate
[c] A surplus of commodity exports (+) over imports (—) of goods and services, etc
[d] Before inventory valuation adjustment
N A =Not available

Note Inventory profit or loss must be added to saving, investment or income before inventory valuation adjustment to arrive at the corresponding saving, investment or income data after inventory valuation adjustment A minus sign (—) before inventory valuation adjustment indicates an inventory profit while a plus sign (+) indicates an inventory loss

foreign balances Profits retained by foreign branches and controlled companies and foreign investment in kind are estimated from the Reserve Bank survey data on Foreign Liabilities and Assets and Bank's Monthly Bulletins while the value of gold smuggled into India is estimated from a recent study of the Bank

An indirect estimate of saving in India is made in this study by adding net foreign investment (measured from current account), suitably adjusted for transactions not reflected in the balance of payments statistics, to domestic investment, a procedure which will sometimes be termed as the "Investment Approach" to saving estimation The methods of estimation of domestic investment are discussed in detail in Part II The derivation of net foreign investment is also discussed in detail in Part II Tables 2 1 and 2 2 show estimates of saving and investment in current prices for the period 1948-49 to 1957-58

A direct estimate of saving is also made by adding together the savings of the three sectors, viz, Individuals, Corporations and Government The methods of estimation are discussed in the following chapters The data are shown in Tables 2 3 and 2 4[1]

Different Concepts

A distinction is drawn between *net saving* and *gross saving* in the tables presented in this volume The gross concept of saving corresponds to the cash flow concept The net concept represents a measure of saving according to business accounting procedure, without making any adjustment for inventory profits or losses For meeting the requirements of the social accounting concept, it is necessary to further adjust the business accounting concept to show depreciation on a replacement cost basis and make a valuation adjustment for reported inventory investment by all sectors

Because of the paucity of essential price and other data, it was decided not to convert the corporate book depreciation or original cost figures to a replacement cost basis, which probably results in some under statement in the estimates of such depreciation made in the study However, the more economically important and more statistically defensible *inventory valuation adjustment* to eliminate corporate inventory profits or losses is made—to the National Council's knowledge for the first time in India For the Individuals' sector depreciation is estimated in 1948-49 to 1957-58

[1] See also Charts 2 1 2 2 and 2 3

TABLE 22

AN INDIRECT ESTIMATE OF GROSS INVESTMENT AND SAVING IN INDIA, 1948-49 to 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Domestic investment*	*10944*	*11992*	*11306*	*13085*	*12630*	*12841*	*15039*	*18072*	*20506*	*23156*
1 Government	2009	2590	2632	2856	3205	3476	4265	5763	7060	9234
2 Corporations[a]	2000[b]	2084	1079	2325	1345	870	1852	2314	2725	3122
3 Individuals	6935	7318	7595	7904	8080	8495	8922	9995	10721	10800[b]
II *National saving*	*8389*	*11441*	*11534*	*11056*	*12860*	*13172*	*14847*	*18006*	*17360*	*18885*
1 Government	127	1562	1896	2734	1704	1552	1793	1991	2646	2704
2 Corporations after inventory valuation adjustment	N A	471	457	903	1128	704	1115	945	552	895
(i) Inventory valuation adjustment	N A	—279	—222	—238	402	23	120	—225	—439	—76
(ii) Before inventory valuation adjustment	N A	750	679	1141	726	681	995	1170	991	971
3 Individuals	N A	9408	9181	7419	10028	10916	11939	15070	14162	15286

[a] Includes investment of foreign branches
[b] Rough estimate
N A =Not available

TABLE 23

A DIRECT ESTIMATE OF NET SAVING IN INDIA, 1948-49 to 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Government saving	—257	998	1358	2089	959	810	957	1128	1663	1418
II Corporate saving after inventory valuation adjustment	*N A*	*—123*	*158*	*194*	*603*	*309*	*522*	*322*	*44*	*207*
1 Inventory valuation adjustment	N A	—279	—222	—238	402	23	120	—225	—439	—76
2 Saving before inventory valuation adjustment	388	156	380	432	201	286	402	547	483	283
III Individuals' saving	N A	3483	4789	2961	4831	5050	5866	8844	7578	9083
IV National saving	N A	4358	6305	5244	6393	6169	7345	10294	9285	10708

N A = Not available.

TABLE 2.4

A DIRECT ESTIMATE OF GROSS SAVING IN INDIA, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Government saving*	127	1562	1896	2734	1704	1552	1793	1991	2646	2704
II *Corporate saving after inventory valuation adjustment*	*N A*	*471*	*457*	*903*	*1128*	*704*	*1115*	*945*	*552*	*895*
1 Inventory valuation adjustment	N A	—279	—222	—238	402	23	120	—225	—439	—76
2 Saving before inventory valuation adjustment	N A	750	679	1141	726	681	995	1170	991	971
III *Individuals' saving*	N A	7812	9248	7566	9554	9914	10868	14018	12932	13883
IV *National saving*	N A	9845	11601	11203	12386	12170	13776	16954	16130	17482

N A =Not available

rupees and is probably not far from a replacement cost basis, but here no estimate is made of major areas of inventory investment and hence no *inventory valuation adjustment* seems warranted. Further details on these matters are given in the relevant chapters.

SUMMARY OF FINDINGS

The National saving-income ratio (which is always measured net of depreciation unless otherwise specified) varied from roughly 6 per cent in the three year period preceding the First Plan to 7 to 8 per cent during the five years of the First Plan and 9 to 10 per cent during the first two years of the Second Plan. Where two percentages are given, the lower figure is obtained from the sum of the direct estimates of saving for the three major saver groups while the higher figures are derived from the indirect estimates of the total saving. The reasonable proximity of the results of the two approaches is encouraging though, as noted earlier, the two sets of estimates are not completely independent.

While there are several omissions in the coverage of the saving estimates presented in this study (and of course a substantial margin of error in several of the component series) probably the major omission relates to farm and non-corporate trade inventory investment for which no usable data are available. It is, therefore, of some interest to note that the net increase in inventories which is covered in this study amounted to 4.2 per cent of gross fixed investment and 0.6 per cent of the national income over the entire period covered. In other countries where there is more comprehensive coverage of inventories, the ratios to gross fixed investment and national income were of higher, though widely varying, orders of magnitudes, for example, 5.9 per cent and 1.0 per cent in the U.S.A. and 23.6 per cent and 6.6 per cent in Japan.[1] In the earlier history of the U.S.A. the ratios were intermediate between the recent U.S.A. and Japanese figures.[2] If an average of these ratios is, therefore, taken as an extremely crude estimate of total annual inventory investment for India, the national saving-income ratio in this study would have to be raised by approximately 20 per cent if the ratio to fixed investment is used as the basis of adjustment (i.e. from 9 to 10 per cent in the last two years

[1] See *Survey of Current Business*, July 1959, U.S. Department of Commerce for U.S.A. data and *Economic Bulletin for Asia and Far East*, September 1960, United Nations for Japanese data.

[2] See Simon Kuznets: *National Product Since 1869*, National Bureau of Economic Research, 1946.

to 11 to 12 per cent) and by even more if the national income is used for such adjustment

Turning from an examination of the National average propensity to save out of income to the marginal propensity to save—the latter being more relevant for projection of saving and National planning—the estimates which have been made are more conjectural for several reasons In spite of the fact that any constant errors of estimation should affect the computation of marginal propensities less than that of average propensities, the estimated marginal propensities can easily be distorted by systematic biases, e g, if the more recent saving estimates reflect wider coverage than the earlier figures Perhaps more important, the comparatively small number of observations in the time series data, the possibly non continuous effects of planning *vs* the assumed stable saving-income relationship, and the diversity of economic relationships and models which can be used to fit the data result in a considerable margin of uncertainty in the estimated marginal propensity to save for India as a whole

A simple linear relation of National saving to National income in current rupees implies a marginal propensity of 0 20 for the direct estimate of saving and 0.25 for the indirect estimate (the marginal propensity for gross saving, which is more reliable though less useful than for net saving, seems to be about 0 05 higher). Deflated figures (in constant rupees and even more so in *per capita* constant rupees) point to even higher marginal propensities, with the constant rupee regressions which have the highest linear correlations pointing to marginal propensities of 0 25 for the direct and 0 30 for the indirect estimates Non-linear relations (the saving-income ratio related to income or to the log of income) yield marginal propensities of 0 20 or higher at the levels of national income characterizing the end of the period covered Adding lagged consumption (for the previous year) to income as a second explanatory variable in the linear relations, to take care of the possible lag or stability of consumption and also to allow for possible differences in short-run and long-run income effects, indicates a year-to-year (or short-run) marginal propensity to save of 0.15 and 0 20 for the direct and indirect estimates in current prices (and not a much different long-run propensity) and apparently even lower figures (short-run but not long-run) in constant prices Adding business income (corporate and small enterprises income both after taxes) as the second explanatory variable, to adjust roughly for the potentially most important distributional differences in saving propensities, gives peculiar results suggesting that virtually all saving is done by the non-agricultural business sector, but the regression coefficients have extremely large standard

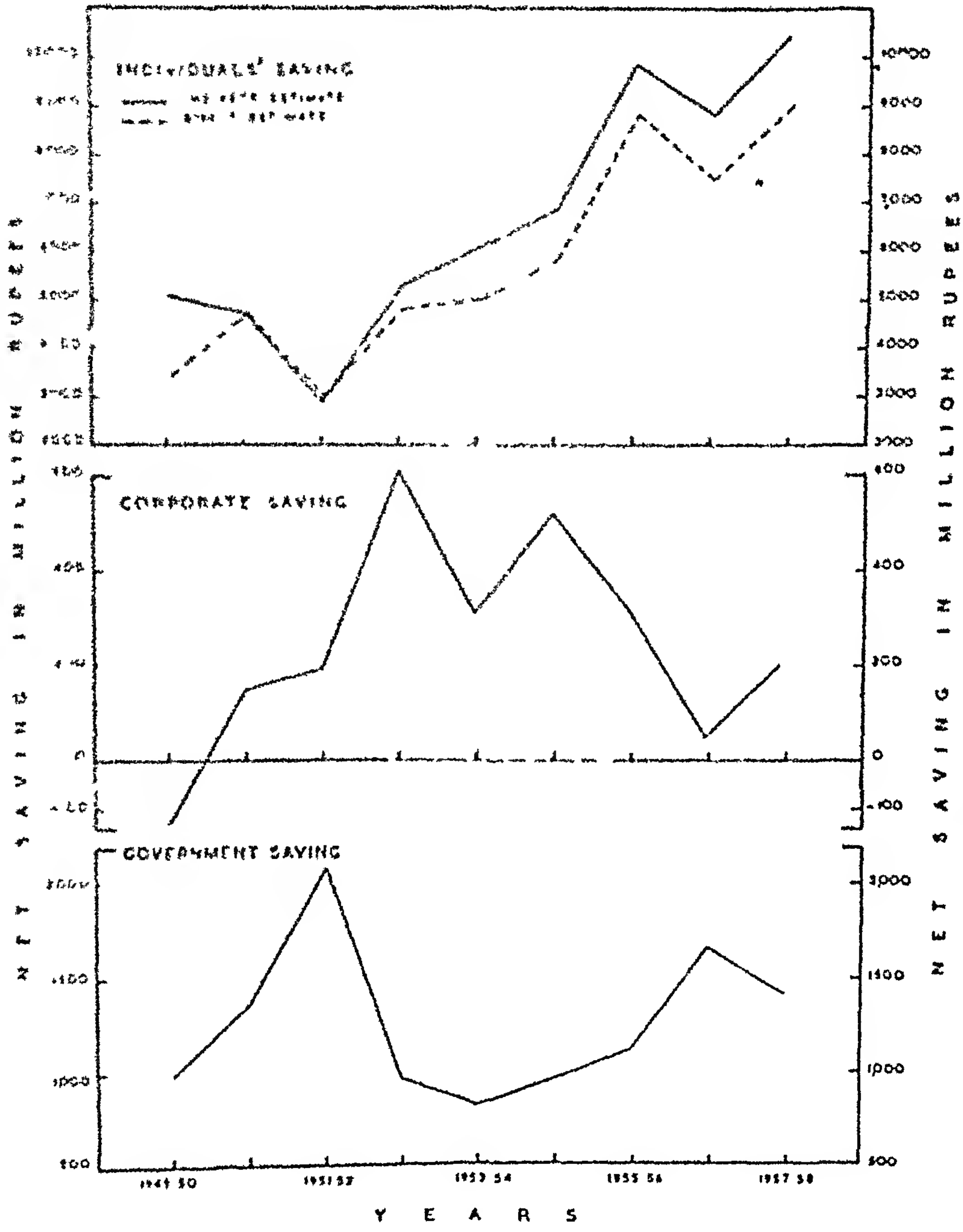
errors[1] Finally, simple complete economic models, in which Government and investment expenditures are taken as autonomous and which use different consumption functions related to the national income or to disposable personal income, point to even higher marginal National saving propensities than the corresponding single equation least-square relationships While this discussion has underlined the uncertainty in the estimates of the marginal propensity to save, the analysis seems to point to a figure of at least 0 20

The National saving-income ratio in India in recent years seems to compare favourably with corresponding ratios in many other countries (e g, U S A, U K etc), for which reasonably reliable data are available, though international comparisons of this nature are notoriously tenuous[2] However, these ratios in India are well below those in Japan and West Germany which have experienced unusually rapid economic growth in recent years, and probably also below the ratios in several Communist countries, but in the latter case the concepts are sufficiently different so that without additional information comparisons are particularly dangerous No attempt will be made here to compare the marginal National saving propensities of different countries

[1] Of the other variables for which there are theoretical reasons and statistical evidence (mainly in other countries) for believing may affect saving significantly, usable wealth and income size distribution data are not available Interest rates have not been found useful in explaining National saving behaviour in other countries See Irwin Friend *Determination of the Volume and Composition of Saving with Special Reference to the Influence of Monetary Policy*, Commission for Money and Credit, [illegible] New York

[2] See *Statistical Year Book*, 1959 United Nations, *World Economic Survey*, 1957, United Nations and Government Publications for U S A, U K, Japan and West Germany

NET SAVING OF DIFFERENT SECTORS IN INDIA
1949-50 TO 1957-58



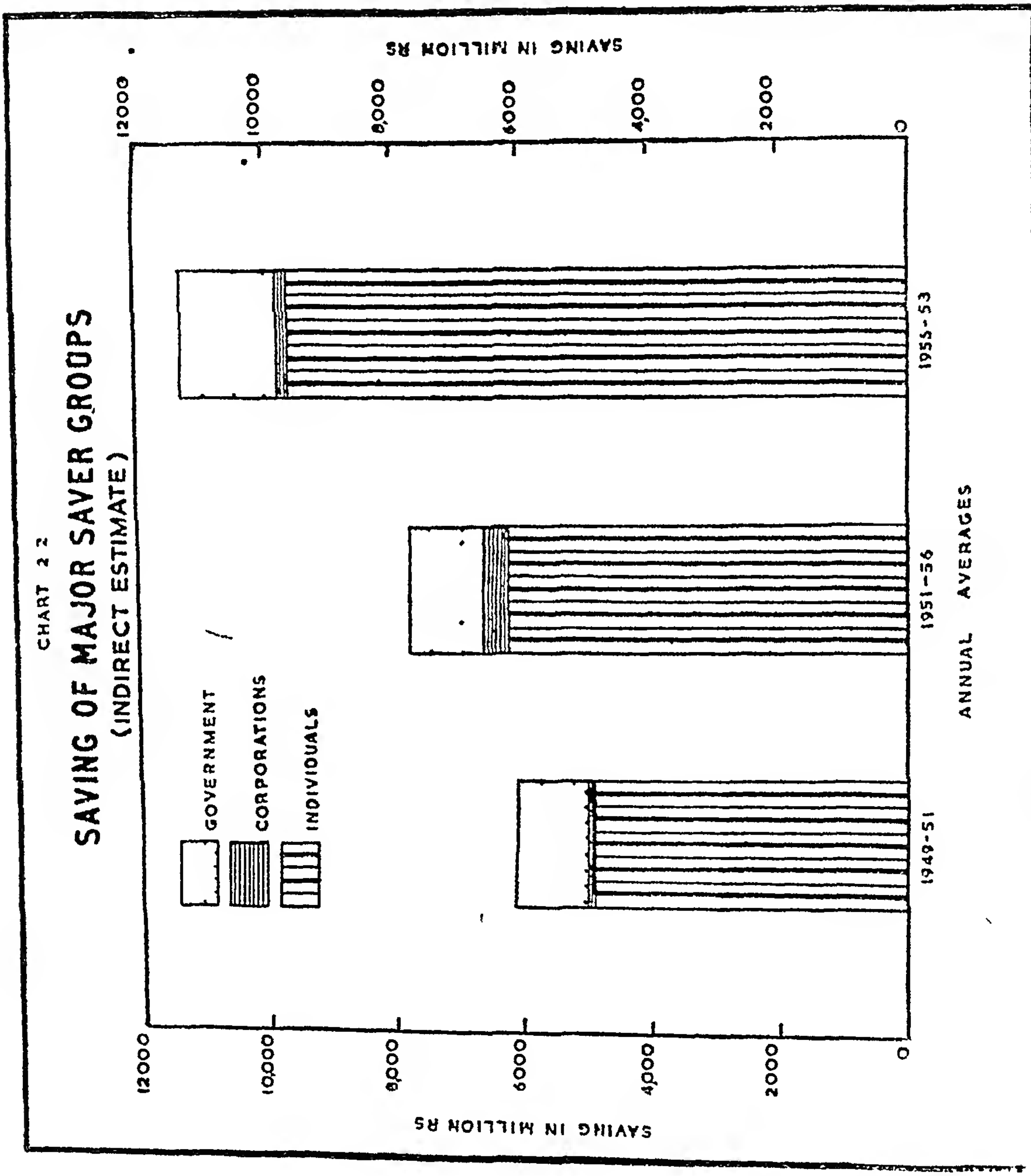


CHART 2.2
SAVING OF MAJOR SAVER GROUPS
(INDIRECT ESTIMATE)

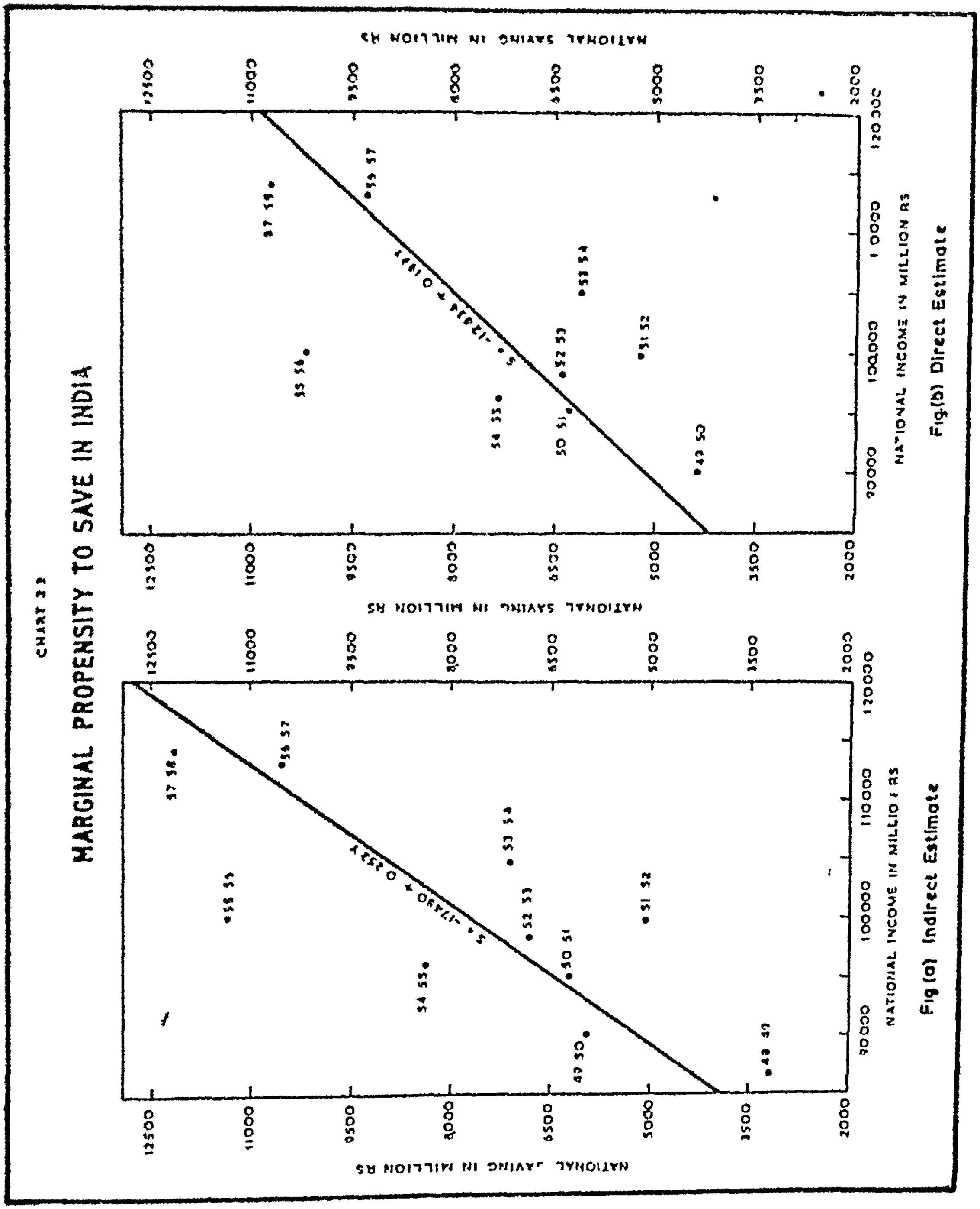


CHART 3.2
MARGINAL PROPENSITY TO SAVE IN INDIA
NATIONAL SAVING IN MILLION RS
NATIONAL INCOME IN MILLION RS
Fig (a) Indirect Estimate
Fig.(b) Direct Estimate

CHAPTER 3

INDIVIDUALS' SAVING

THE INDIVIDUALS' SECTOR for the purpose of this monograph is defined on a residual basis as comprising all non-Corporate non-Government bodies It represents more specifically all types of households, farm and non-farm unincorporated enterprises engaged in manufacturing and other business activities and non-profit organizations Included under the category of non-profit organizations are charitable trusts, religious endowments, educational institutions, foundations and hospitals etc

The unincorporated business enterprises in India are of two types (i) sole proprietorships, and (ii) partnerships A sole proprietorship is a business entity owned exclusively by one individual and may be called a "business household" A partnership firm constitutes two or more individuals who own and operate the business In the case of partnership firms, a clear distinction is made similar to that of a corporation between the earnings retained in business and the share of profits withdrawn by the partners However, no separate estimation of saving and investment of sole proprietorships and partnership firms could be made in this study due to lack of adequate and reliable statistical material

The accounts for farm households could hardly be separated into business accounts and personal accounts except in the case of farm households which operate on a large-scale The question of separating earnings retained in farming activity from total farm earnings has, therefore, theoretical interest only No attempt has been made to separate farm from non-farm or rural from urban saving in the Individuals' sector because the basic data do not permit such a segregation without incurring an indefensible margin of error The National Council will, however, be able to undertake such a breakdown once the urban and rural saving surveys are completed

MEASUREMENT

There exist at least four distinct approaches to estimate Individuals' saving (or investment) The first approach is to derive Individuals' saving

as a residual from total National saving by deducting the estimated savings of the Corporate and the Government sectors The total National saving is measured from total domestic investment including investment by foreign branches after making relevant adjustments for net foreign investment of India This approach involves the estimation of investment by Government, Corporations and Individuals in order to arrive at total investment The estimation procedures adopted for deriving Corporate and Government investment are discussed in Chapters 4 and 5 while the procedures for the Individuals' sector are described briefly in this chapter and in greater detail in Part II

Government saving represents the net surplus on current account of Government administration and departmental enterprises and also the retained earnings of all the Government statutory corporations and Government registered companies Retained profits of corporations and cooperative institutions adjusted for inventory valuation (the inventory valuation adjustment representing the excess of change in physical volume of inventories at current prices over changes in book value) constitute savings of the Corporate bodies An estimate of saving of Individuals is obtained by deducting from total National saving (also after inventory valuation adjustment) the savings of Corporations and the Government

The second method of estimation of Individuals' saving consists of adding together the net increase in all types of assets (apart from revaluation items) held by Individuals and subtracting the net increase in Individuals' liabilities Individuals' saving can be held either in the form of financial assets like currency, deposits, securities and insurance policies, or physical assets like house property, agricultural implements, transport equipment and inventories This approach, which is also known as the "Institutional Approach", is particularly useful for estimating the volume and composition of Individuals' saving It is probably the most accurate method of estimating the volume and composition of Individuals' saving in view of its reliance on a wide variety of institutional data much of which can be checked against different sources and can be considered quite reliable It has the added advantage of showing the forms that saving takes A detailed analysis of the composition of Individuals' saving is made in this chapter, which, in fact, forms one of the most important parts of the study

The following items of assets and liabilities are identified for the purpose of this monograph, a more elaborate classification would have required additional data which are not available

I Individuals' Assets

A Financial Assets
- Liquid Assets
  - Currency
  - Bank Deposits[1]
    - (i) Scheduled and non scheduled banks
    - (ii) Cooperatives
  - Precious metals[2]
- Contractual Saving
  - Insurance funds[3]
  - Provident funds[4]
  - Pension funds
- Other Financial Assets
  - Small Savings[5]
  - Government securities[6]
  - Corporate securities[7]
    - (i) Company securities
    - (ii) Cooperative shares

B Non Financial Assets
- Farm Investment
  - Land improvement
  - Irrigation
  - Agricultural implements and machinery
  - Farm houses
  - Other capital items (other than inventories)

[1] Includes time, demand and saving deposits but excludes postal savings bank deposits which are covered in small savings and which might also be considered as liquid assets

[2] Includes gold and silver

[3] Includes life insurance funds of provident societies

[4] Relates to the total of employers and employees' contributions to provident funds of Government employees employees covered under E P F Scheme, Workers in Coal Mines and Plantations, Employees of Educational Institutions and Financial Corporations etc

[5] Includes Post Office Savings Bank Deposits Post Office Certificates, National Savings Certificates, Treasury Savings Deposit Certificates, 12-Year National Plan Savings Certificates and 15 Year Annuity Certificates

[6] Includes the securities of Central and State Governments as well as Local Authorities

[7] Includes all types of shares and debentures.

Rural Construction
  Residential
  Non-residential[1]
Urban Construction
  Residential
  Non-residential
Non-Corporate Business Assets[2]
  Fixed assets
  Inventories of registered enterprises
Transport Equipment[3]

II. Individuals' Liabilities

To A Government Sector
  B Corporate Sector
    Banks
    Insurance Companies
    Loan and Investment Companies
    Non-Government Non-financial Corporations
    Cooperatives

III Individuals' Saving = Δ I — Δ II

A third approach to estimation of Individuals' saving is to deduct current expenditures including depreciation and taxes from current incomes The data on current income can be obtained from National income statistics while data on current expenditures can at least theoretically be independently estimated from product statistics For the present, no careful attempt has been made to derive saving by this approach on account of lack of sufficient information on current expenditures though crude estimates of consumption which are available have been used for rough checking purposes

A fourth approach to the estimation of Individuals' saving is to conduct a sample survey and thereby obtain information from households

[1] Excludes the construction of farm houses which are non residential in character and included in farm investment

[2] Includes small enterprises, registered and unregistered, engaged in manufacturing activity but excludes trading and transport concerns etc

[3] Includes consumer durable goods such as automobiles, trucks etc.

about either (i) changes in assets and liabilities—saving being estimated as net increase in assets less net increase in liabilities apart from valuation changes and transfer items or (ii) current income and current expenditure including capital consumption allowances and taxes—the difference being estimated as saving or (iii) both types of information simultaneously to ensure a check on the estimates through the balance sheet approach and the income account method A number of studies in other countries[1] as well as more limited experience in India indicate that survey data on assets and liabilities give better estimates of saving than survey data on income and expenditures In either case the survey approach provides a completely independent estimate of Individuals' saving and its components which, though generally not so reliable as estimates obtained from aggregate data utilized in this study, has the advantage of providing distributional and motivational data for different groups of individuals which cannot be obtained otherwise [2]

Some Problems

The fundamental difficulty which arises while estimating saving of Individuals is in regard to net physical investment Not only does most of their inventory investment have to be excluded for lack of even reasonably reliable data and their estimated gross fixed investment has a substantial margin of error, but also the estimated depreciation necessary to derive net from gross saving (or investment) poses great conceptual and even greater statistical difficulties Practically, no information is available either on the magnitudes or on the rates of depreciation allowed on Individuals' capital assets, save for some rough indications on the life of a few assets

In the absence of any reliable data, annual rates of depreciation for different items of Individuals' fixed assets were determined by the National Council taking into consideration the few scraps of information and informed opinion on the average expected life of the asset concerned The annual amount of past investment necessary together with average life for computing current depreciation was estimated by extrapolating

[1] See, for example, Irwin Friend and Stanley Schor "Who Saves?", *Review of Economics and Statistics*, Part 2, Harvard University Press, May 1959

[2] The National Council is about to complete a survey of about 4,600 urban households which will provide data on urban saving and is planning to organize a large-scale rural survey which will provide similar information for the rural sector

backwards the 1948-49 to 1957-58 gross investment series as described in Part II. Though subject to substantial limitations, this approach was deemed much better than the alternative of valuing the stock of assets at the beginning of the period and applying an extremely arbitrary depreciation rate. For the purpose of calculating depreciation the "straight-line" method was used and the price level reflected in the depreciation figures is only moderately below the average for the period 1948-49 to 1957-58. Turning to the estimates of gross investment, the possible magnitude of the under-statement of saving as a result of under-coverage of inventory investment has been indicated in the previous chapter on national saving, the entire under-estimation of inventory investment discussed there is attributable to the Individuals' sector The many limitations in the estimates of gross and net fixed investment are indicated in Part II but it is not possible to make definite statements about the direction of the net error in so far as saving is concerned The absence of estimate of the imputed value of labour and materials embodied in many types of fixed investment (though some imputation is reflected in the estimates of construction in view of the approach followed) definitely understates gross investment but may not be too significant for net investment and saving. Some physical investment by private charitable, religious and educational organizations is also omitted but this is likely to be quite unimportant

Sources of Data

The basic data for most of the estimates of Individuals' financial saving presented in this study are obtained from the various publications of the Reserve Bank of India, the Controller of Insurance, Employees' Provident Fund Commissioner, Comptroller and Auditor General of India and several other agencies

The reports of the National Sample Survey, the reports of the All-India Rural Credit Survey of the Reserve Bank of India and the reports of the Census of Manufactures, besides other research papers, constitute the basic source material in preparing the estimates of Individuals' investment in physical assets The details are discussed in Part II Tables 3 1 and 3 2[1] show Individuals' net and gross savings respectively as derived from changes in assets and liabilities

[1] See also Chart 3 1

TABLE 31

A DIRECT ESTIMATE OF INDIVIDUALS' NET SAVING IN INDIA, 1948-49 to 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I ASSETS										
A Financial	*N A*	*738*	*2131*	*322*	*1373*	*1956*	*2885*	*5162*	*3325*	*3429*
1 Currency	N A	—582	800	—1240	—184	254	690	2005	471	394
2 Bank deposits										
(i) Scheduled and non-scheduled banks	N A	—378	—21	—265	—37	73	463	680	383	616
(ii) Cooperatives	N A	50	52	65	56	51	113	176	195	43
3 Gold and silver	202	193	207	363	182	134	116	127	231	332
4 Insurance funds	173	177	178	169	228	258	274	267	252	301
5 Provident funds	260	270	287	335	315	457	419	486	575	693
6 Pension funds	—1	—1	—1	5	10	10	15	30	30	31
7 Small savings	300	262	336	385	401	379	552	684	590	688
8 Government securities[a]	N A	20[b]	19	24	36	92	24	193	263	20
9 Corporate securities										
(i) Corporations[c]	N A	740	247	443	380	186	170	444	234	117
(ii) Cooperatives	N A	—13	27	38	—14	62	49	70	101	164

B *Non-financial*	*2734*	*2989*	*3136*	*3299*	*3357*	*3631*	*3920*	*4822*	*5367*	*6000*[a]
1 Farm investment	786	884	947	923	914	948	945	942	927	N A
2 Rural construction										
(i) Residential	397	392	388	386	385	386	388	392	397	N A
(ii) Non-residential	86	92	91	101	103	102	90	89	88	N A
3 Urban construction										
(i) Residential	550	733	803	824	900	1046	1251	1788	2009	N A
(ii) Non-residential	292	343	364	400	424	490	565	727	1095	N A
4 Non-corporate business investment										
(i) Fixed assets	364	385	378	374	401	411	353	385	363	N A
(ii) Inventories of registered enterprises	89	28	71	—63	—20	6	66	83	48	N A
5 Transport equipment	170	132	94	354	250	242	262	416	440	N A
C *Total assets (A+B)*	*N A*	*3727*	*5267*	*3621*	*4730*	*5587*	*6805*	*9984*	*8692*	*9429*
II *TOTAL NET LIABILITIES*	N A	244	478	660	—101	537	939	1140	1114	346
III. *INDIVIDUALS' SAVING (IC — II)*	N A	3483	4789	2961	4831	5050	5866	8844	7578	9083

[a] Exeludes securities of loeal authorities
[b] Rough estimate.
[c] Relates only to companies registered under the Indian Companies Act
N A =Not available

Note . The data on eooperative deposits and Government securities appear too low for 1957-58 and out of line with the series The estimates of basic data which appear in the Reserve Bank publications when *revised* may give more reliable estimates

TABLE 32

A DIRECT ESTIMATE OF INDIVIDUALS' GROSS SAVING IN INDIA, 1948-49 to 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I ASSETS										
A Financial	*N A*	*738*	*2131*	*322*	*1373*	*1956*	*2885*	*5162*	*3325*	*3429*
1 Currency	N A	—582	800	—1240	—184	254	690	2005	471	394
2 Bank deposits										
(i) Scheduled and non-scheduled banks	N A	—378	—21	—265	—37	73	463	680	383	616
(ii) Cooperatives	N A	50	52	65	56	51	113	176	195	43
3 Gold and silver	202	193	207	363	182	134	116	127	231	332
4 Insurance funds	173	177	178	169	228	258	274	267	252	301
5 Provident funds	260	270	287	335	315	457	419	486	575	693
6 Pension funds	—1	—1	—1	5	10	10	15	30	30	31
7 Small savings	300	262	336	385	401	379	552	684	590	688
8 Government securities[a]	N A	20[b]	19	24	36	92	24	193	263	20
9 Corporate securities										
(i) Corporations[c]	N A	740	247	443	380	186	170	444	234	147
(ii) Cooperatives	N A	—13	27	38	—14	62	49	70	101	164

B. Non-Financial	*6935*	*7318*	*7595*	*7904*	*8081*	*8495*	*8923*	*9996*	*10721*	*10800*[b]
1 Farm investment	2292	2434	2543	2563	2600	2680	2723	2766	2796	N.A
2 Rural construction										
(i) Residential	1636	1651	1667	1685	1704	1725	1747	1771	1796	N A
(ii) Non-residential	319	330	333	348	355	359	352	355	359	N A
3 Urban construction										
(i) Residential	893	1095	1187	1231	1332	1506	1744	2326	2596	N A
(ii) Non-residential	431	497	528	575	610	689	780	959	1354	N A
4 Non-corporate business investment										
(i) Fixed assets	994	1031	1040	1051	1094	1122	1078	1126	1119	N A
(ii) Inventories of registered enterprises	89	28	71	—63	—20	6	66	83	48	N A
5. Transport equipment	281	252	226	514	406	408	433	610	653	N A
C *Total assets (A+B)*	*N A*	*8056*	*9726*	*8226*	*9454*	*10451*	*11808*	*15158*	*14056*	*14229*
II TOTAL NET LIABILITIES	N A	244	478	660	—101	537	939	1140	1114	346
III INDIVIDUALS' SAVING (IC—II)	N A	7812	9248	7566	9555	9914	10869	14018	12932	13883

[a] Excludes securities of local authorities
[b] Rough estimate
[c] Relates only to companies registered under the Indian Companies Act
N.A =Not available

Summary of Findings

The ratio of Individuals' saving to their disposable income rose from 5 per cent in 1948-51 to 6 per cent in 1951-56 and 8 to 9 per cent in 1956-58 The indirect estimates are again, of course, somewhat higher than the direct estimates and both are reasonably close to each other It is interesting to note that still a third estimate of Individuals' saving obtained for 1949-50 and on a crude basis for each of the three years 1952-53 to 1954-55, by subtracting from disposable income consumption estimated from the commodity flow approach, gives results for the four years as a whole surprisingly close to the direct estimates, though with fairly sizeable year-to-year differences[1]

Virtually all forms of Individuals' saving showed a substantial increase in the rate of accumulation over this period with the notable exceptions of corporate securities, precious metals, farm investment, rural construction and non-corporate business investment While the estimates in the case of these exceptions are all rather weak, it is probably true that they did not share in the sharp rise in saving to any great extent, and saving in the form of corporate securities actually seems to have declined The largest absolute increases in Individuals' saving occurred in urban residential and non-residential construction, bank deposits, provident funds and small savings with sizeable but erratic increases in currency and Government securities and smaller increases over the period as a whole in transport equipment and in insurance funds Though financial assets rose somewhat in relative importance over this period, Individuals' investment in the form of real assets still constituted well over one half of the total of Individuals' saving even at the end of the period

As a result of these trends in the different components of saving, urban construction, bank deposits and transport equipment increased most their relative share in the total of Individuals' saving, provident funds and small savings showed little change relatively while the share of corporate

[1] For 1949 50, the estimate of consumption was obtained from S P Dhar, M S Kapur K N C Pillai and V S Puri "Private Consumption in India, 1949-50" *Papers on National Income and Allied Topics* Vol I, Indian Conference on Research in National Income, 1960, while for the other three years rough estimates of consumption were made by the National Council In 1949 50 the resulting estimate of Individuals' saving was intermediate between the two estimates presented in this study while in the other three years the resulting estimates were erratic and averaged very slightly less than the direct estimates presented here

securities, farm investment, rural construction, non-corporate business investment and to a lesser extent precious metals declined appreciably The trend in insurance which showed a moderate decline in relative importance is also noteworthy since it may suggest an area where more saving could be achieved However, at least to some extent, the relatively slow growth in net saving in the form of insurance reflects a relatively rapid growth of repayments and expenses of management

While the estimated trends in the components of saving look reasonable as a whole, care should be taken not to place undue importance on the estimates for any particular year Thus the currency figures for 1951-52 and 1956-57 look out of line, possibly in part reflecting offsetting errors in adjoining years, and some of the financial components for 1957-58 (both assets and liabilities) seem too low

The marginal propensity to save by Individuals out of their disposable income is slightly less than 0 20 according to the simple linear current rupee regressions for both the indirect and direct estimates of saving It is somewhat higher than 0 20 in the corresponding constant rupee regressions (1952-53 prices) in which both estimates of Individuals' saving are fairly closely correlated with income Adding the previous year's consumption to these relationships again reduces somewhat the estimated short-term but not the long-term marginal propensity to save (and in the case of the direct estimates of saving raises the multiple correlation coefficient to 0 93) Substituting the previous years' income for the previous years' consumption yields a much poorer correlation but again the combined total of the two income regression coefficients is not greatly different from 0 20 (in this case somewhat above) Finally, once again the complete economic or income models tested, referred to in the preceding chapter, seem to imply considerably higher saving propensities than the single-equation least square relationships

The recent average saving-income ratios for Individuals in India seem fully as high as the average for industrialized economies for which comparable data are available[1] Japan and West Germany again are notable exceptions Data for satisfactorily comparing the composition of Individuals' saving in different countries are not readily available, but it is interesting to note that residential construction seems to account for as large a share of investment and saving in India as in most industrialized economies including the United States and United Kingdom and for about

[1] See *World Economic Survey*, 1957, United Nations, New York, p 27

three times the corresponding share in Japan[1] As compared to industrialized economies,[2] saving in financial assets and dissaving in liabilities as might be expected are relatively less important—particularly for items like insurance and other retirement funds (viz provident and pension funds) and corporate securities

[1] *World Economic Survey, 1957,* United Nations, p 49, the data on which this statement is based refer to gross rather than net figures

[2] See *Survey of Current Business and National Income Supplements,* U S Department of Commerce for the United States data

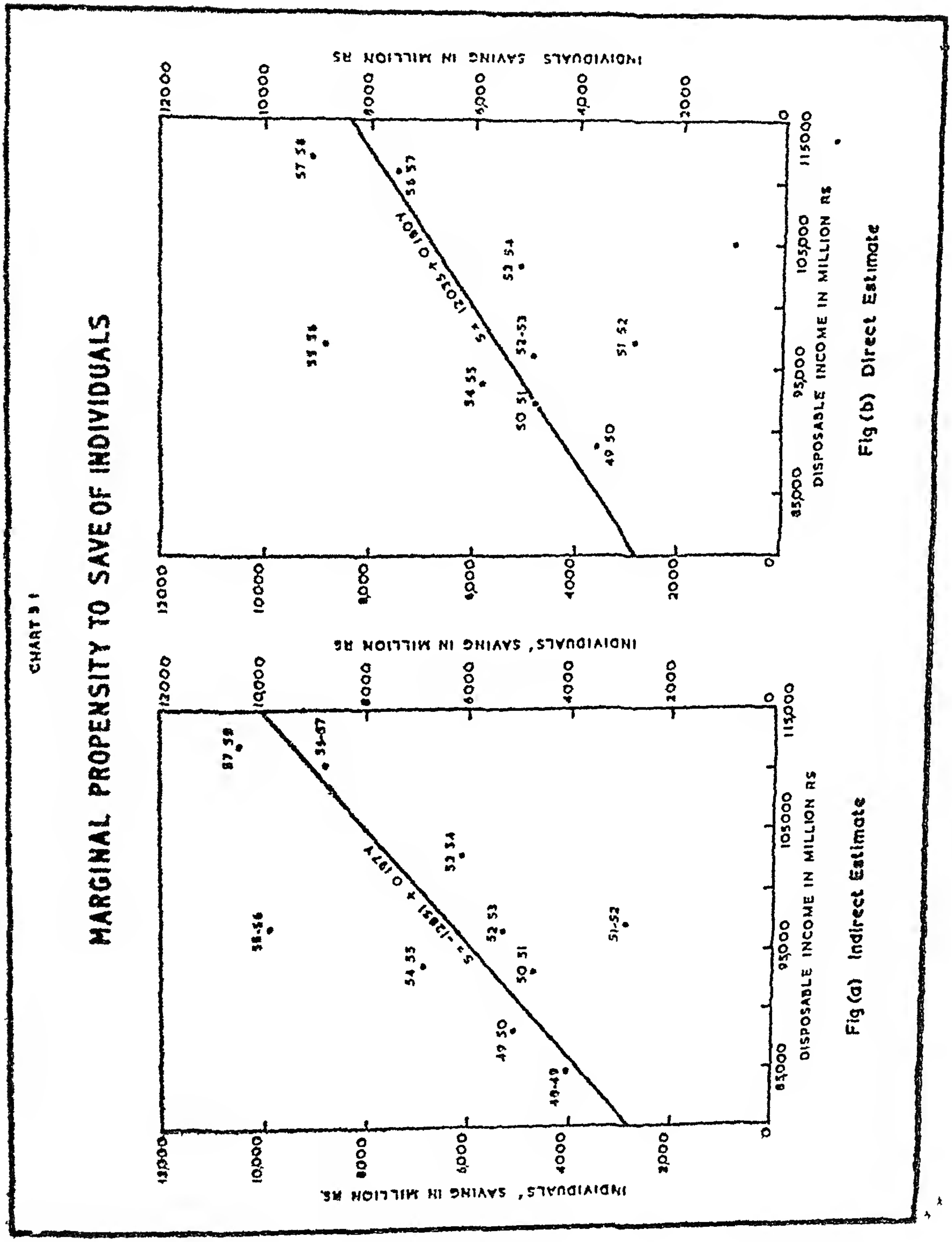


CHART 3.1
MARGINAL PROPENSITY TO SAVE OF INDIVIDUALS
INDIVIDUALS' SAVING IN MILLION RS
DISPOSABLE INCOME IN MILLION RS
Fig (a) Indirect Estimate
Fig (b) Direct Estimate

CHAPTER 4

CORPORATE SAVING

FOR THE PURPOSE of this study, the Corporate sector represents all non-Government companies registered under the Indian Companies Act and all cooperatives registered under the Cooperative Societies Acts All Government companies registered under the Indian Companies Act are treated as belonging to the Government sector in addition, to statutory autonomous corporations created by the Government Foreign branches incorporated in foreign countries, although operating in India, are specifically excluded from the domestic Corporate sector

The various types of cooperatives that are included under the Corporate sector can be broadly grouped under (i) Cooperative Credit Societies, (ii) Cooperative Non-credit Societies, and (iii) Cooperative Land Mortgage Banks The saving and investment of cooperatives are estimated and shown separately under the Corporate sector in order to provide a measure of their importance

A distinction is made between financial and non-financial corporations and their investment and saving are estimated separately A further breakdown of the estimates for financial corporations is also made into banking companies, insurance companies and all other financial companies such as loan and investment trusts in order to study more closely the role of financial intermediaries in the process of generating saving potential and its utilization

During the period under study some companies were nationalized and hence ceased to belong to the Corporate sector The State Bank of India and Life Insurance Corporation of India are examples of this type Until nationalization the saving and investment of such companies are shown in the Corporate sector and thereafter in the Government sector

The branches of foreign companies are not registered under the Indian Companies Act and hence are excluded from the Corporate sector for the purpose of estimating domestic saving On the other hand, the foreign controlled and portfolio companies are of similar nature to other Indian corporations, save for the composition of shareholders and the

consequences therefrom In the case of controlled companies, control and management is vested in foreigners either because the majority of the share capital is held by them or due to an agreement between the company and the foreign managing agency The case of portfolio companies is, however, somewhat different in the sense that their control is in Indian hands and the foreign holding of the share capital is less than 50 per cent of the total capital employed The investment by Indian corporations can be divided into investment made within India and investment made abroad, but the latter is completely negligible The investment of foreigners made within India is defined as domestic investment but treated as borrowing from abroad The saving of foreign controlled companies and portfolio companies in which foreigners own shares is included in the saving of the Corporate sector and the extent of such saving is separately shown.

Measurement

The saving of Corporations can be measured either from the income and expenditure statements or from balance sheets submitted annually to the shareholders, Income-Tax Department, Company Law Administration, or other Governmental agencies The Corporate profits given in these statements are generally defined by means of the accounting procedures adopted or by the prevailing income-tax rules The main difficulty from the point of view of economic analysis is in the basic concept of corporate profits as used in such accounts which fails in certain important respects to meet the economic definition of saving Corporate saving, as already defined, is the change in *earned surplus* which is numerically equal to the difference between current income and current expenditure including depreciation, taxes and dividends paid The significant characteristic of this definition is that it excludes all items of income and expenditure which are in the nature of *revaluations* including both realized and unrealized capital gains and losses This holds true also when Corporate saving is defined as a change in *net worth* Thus, the actual measurement of Corporate saving in this study, based on either of the above mentioned definitions, involves certain adjustments in the reported profits as presented in the Corporate accounts

The most important adjustment made in this study to make the retained earnings as reported in the corporations' income-expenditure statements conform more closely to the theoretical concept of saving is the *inventory valuation adjustment.* This adjustment is made with a view to eliminat-

ing the inventory gains and losses which arise as a result of price changes The inventory valuation adjustment is made for non-Government non-financial corporations which constitute the bulk of the Corporate sector The realized and unrealized capital gains and losses on inventories which are reflected in the Corporate books are eliminated by making proper adjustments taking into account the turnover period of inventories, the changes in prices reflected in inventories and the methods applied in the valuation of inventories As a result, the change in book value of inventories is adjusted to the current value of the change in the volume of inventories which is taken as the measure of inventory investment, and a corresponding adjustment is made in the Corporate saving as measured from the income account Theoretically, revaluation of fixed assets should also be eliminated in the measurement of saving But as this is a rare phenomenon in the case of Indian Corporations, no adjustments are attempted in this study

The investment of the Corporate sector is derived from annual balance sheets The various items of investment as shown in these financial statements are grouped under (i) fixed assets—(a) buildings, (b) plant and machinery and (c) other fixed assets—and (ii) inventories—(a) raw materials, (b) finished goods and works-in-progress and (c) others Investment in land is excluded in arriving at estimates of Corporate investment since it does not constitute an item of economic investment

Sources of Data

The estimates of saving and investment of the Corporate sector in this study are derived primarily from samples of combined balance sheet statements and income-expenditure accounts submitted to shareholders These combined statements are presented separately for each one of the following sub sectors of the Corporate sector (a) non-Government non-Financial Corporations, (b) non-Government Financial Corporations and (c) Cooperatives

The combined income-expenditure accounts and balance sheets of non-Government non-financial companies were prepared separately for large and small public and private limited companies by blowing up the corresponding sample data on the basis of paid-up capital For this purpose the National Council analysed the financial statements of a sample of small public and private companies while it used the data relating to samples of large public and private companies as published periodically by the Reserve Bank of India In this connection, an attempt was made

to reconcile the different available estimates of the paid-up capital of all non-Government non-financial companies The paid-up capital series of the Company Law Administration were finally accepted as the most reliable This paid-up capital series is used to inflate the estimated saving data from the sample to the population of corporations

The National Council used the sample data provided by the Reserve Bank for large public companies 1950-51 to 1957-58, large private companies 1956 57 and 1957-58, and small public companies 1955-56, to arrive at estimates for the whole period The National Council analysed balance sheets of small public and small private companies to supplement the Reserve Bank sample data to get the best possible estimates for the whole period 1950 51 to 1957-58 The details are discussed in Part II

The saving and investment of non-Government financial companies are derived from the *Statistical Tables Relating to Banks in India* published by the Reserve Bank, and *Indian Insurance Year Books* published by the Office of the Controller of Insurance The corresponding estimates of saving and investment attributable to loan, investment and other financial companies are, however, arrived at on the basis of their paid-up capital assuming that the ratio of profits to paid-up capital of these companies will be of the same order of magnitude as that of banking companies

The National Council prepared income and expenditure statements and balance sheets of various categories of cooperatives on the basis of the statistics presented in the *Statistical Statements Relating to the Cooperative Movement in India* published periodically by the Reserve Bank of India and derived their saving and investment estimates from these statements for the period under study

Lastly the available material in regard to the surveys of India's Foreign Liabilities and Assets conducted periodically by the Reserve Bank of India and published in its reports was consulted in order to estimate retained earnings of foreign branches and foreign controlled and portfolio companies The estimates of saving and investment thus derived are presented in Table 4 1[1]

SUMMARY OF FINDINGS

The average Corporate saving-income ratio was 30 per cent for the period as a whole showing great year-to-year variability but no long

[1] See also Chart 4 1

TABLE 41

AN ESTIMATE OF CORPORATE SAVING AND INVESTMENT IN INDIA, 1948-49 to 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Saving before IVA*										
1 Gross	N A	750	679	1141	726	681	995	1170	991	971
2 Net	388	156	380	432	201	286	402	547	483	283
II *Investment before IVA*										
1 Gross	N A	2207	1145	2408	788	712	1656	2460	3071	3085
2 Net	N A	1613	846	1699	263	317	1063	1837	2563	2397
III *Inventory valuation adjustment*[a]	N A	—279	—222	—238	402	23	120	—225	—439	—76
IV *Saving after IVA*										
1 Gross	N A	471	457	903	1128	704	1115	945	552	895
2 Net	N A	—123	158	194	603	309	522	322	44	207
V *Investment after IVA*										
1 Gross	N A	1928	923	2170	1190	735	1776	2235	2632	3009
2 Net	N A	1334	624	1461	665	340	1183	1612	2124	2321
VI *Corporate income after taxes*										
1 Before IVA	785	543	853	973	708	840	1029	1258	1198	1006
2 After IVA	N A	264	631	735	1110	863	1149	1033	759	930

[a] Relates only to non-government non-financial corporations
N A =Not available

term trend The ratio of reported Corporate retained profits to income, which is of course prior to inventory valuation adjustment, was significantly higher, averaging 39 per cent for the period, and was characterized by much more year-to-year stability It should be observed that the former ratio is economically more meaningful but the latter is statistically more reliable

Within the Corporate sector, the trend in the level of saving for financial corporations and cooperatives was upward unlike the absence of any clear trend for non-financial corporations It is interesting to note that in recent years only a relatively small share of net investment of non-financial corporations has been financed by net saving This is not true of course for gross saving and investment but there is some evidence of a decline in the share of internal financing here also in the last two years covered

The same types of relationships described in the chapters on National and Individuals' saving were fitted to the data on Corporate saving to derive the marginal propensity to save (out of Corporate income after taxes) Both current and deflated regressions were computed, and each of last year's income and last year's dividends (in lieu of consumption) were added as explanatory variables The estimated marginal propensity to save out of income for the Corporate sector averaged about 0 7 (with all of the income coefficients within one standard deviation of this figure) However, the estimated marginal propensity to retain profits before inventory valuation adjustment, based on the reported book data, was considerably lower in the neighbourhood of 0 5

In view of the high saving propensity of the Corporate sector, any expansion in this sector is likely to be associated with an increase in National saving So far, however, the private Corporate sector in India has shown few signs of any real upsurge and has accounted for a very small share of National income and saving In other more developed economies,[1] except for the Communist nations, the Corporate sector not only has a high propensity to save as in India but accounts for a substantial proportion of the National saving unlike the situation in this country It may be noted that while Corporate saving was relatively unimportant in India compared to the U S A, the Corporate average propensity to save in India was quite close to that of the U S A and the marginal propensity seemed higher in India

[1] For example the U S A (*Survey of Current Business*), West Germany (*Bundesbank Vermogensbildung und ihre Finanzierung*), and Japan (*National Income Statistics*)

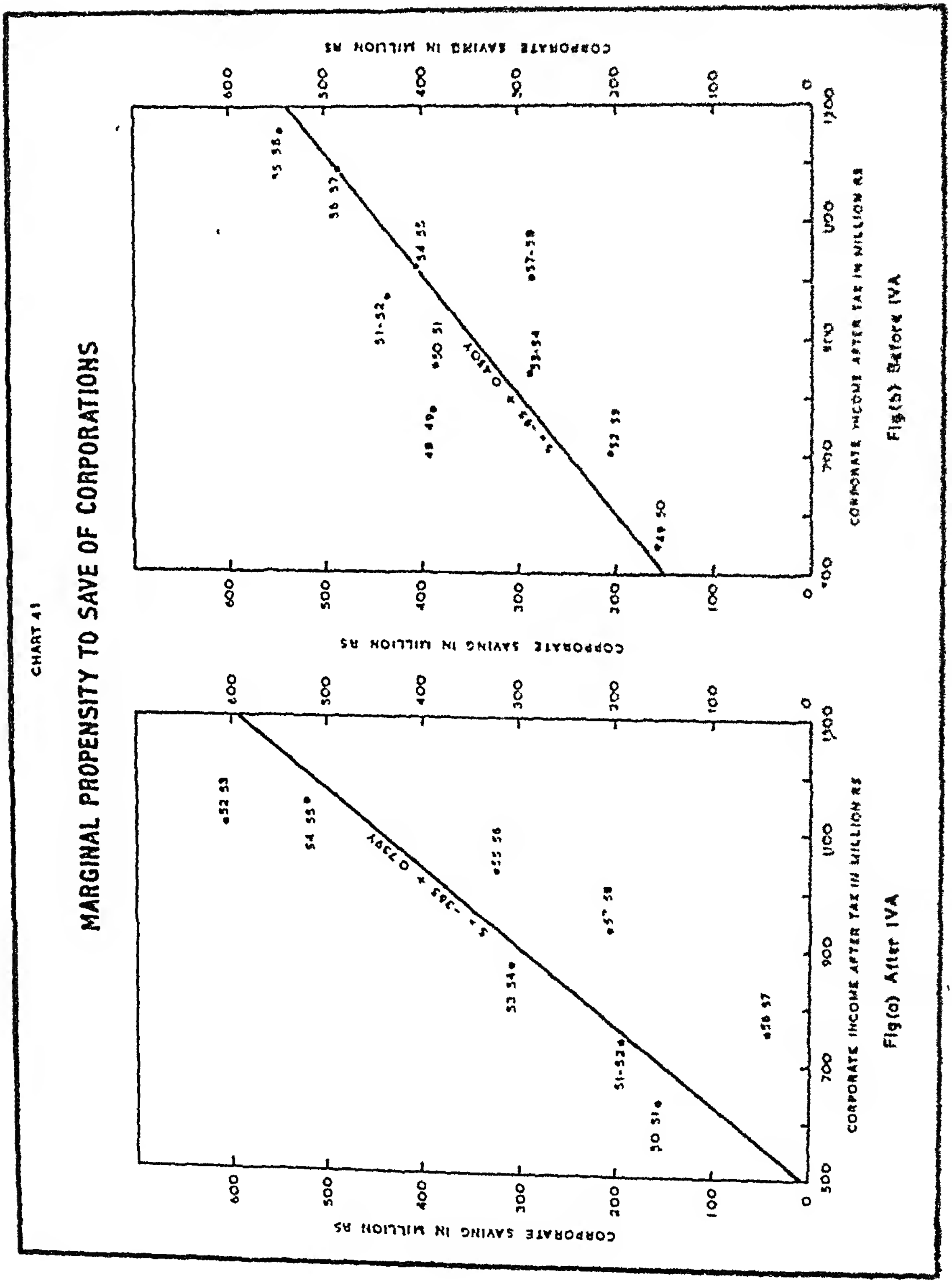


CHART 41

MARGINAL PROPENSITY TO SAVE OF CORPORATIONS

Fig(a) After IVA

Fig(b) Before IVA

CHAPTER 5

GOVERNMENT SAVING

THE CENTRAL AND State Governments, Local Authorities, Departmental Commercial Enterprises, Statutory Autonomous Corporations, and all Government Companies registered under the Indian Companies Act constitute the Government sector. All local bodies such as port trusts, municipal corporations, municipalities, improvement trusts, district and local boards and village panchayats are grouped under Local Authorities while Departmental Commercial Enterprises include railways, posts and telegraphs, transport, electricity and irrigation schemes, overseas communication service etc. The Statutory Corporations are sub divided into financial corporations like the Reserve Bank of India the State Bank of India, the Life Insurance Corporation of India, the Industrial Finance Corporation of India and the State Financial Corporations and non-financial corporations such as Air India International and Indian Airlines Corporation The saving and investment estimates of these sub-sectors are added up to arrive at total saving and investment for the Government sector as a whole

MEASUREMENT

The measurement of saving and investment of the Government sector follows the general approach adopted in this study The annual *Estimates of National Income* prepared by the Central Statistical Organisation provide details regarding the current and capital accounts of Government administrative departments and departmental commercial enterprises The classification of accounts by the Central Statistical Organisation did not provide data which would strictly satisfy the economic definition of saving or investment, particularly with respect to depreciation, but only partial adjustments were possible

Data regarding public authorities are presented under three heads revenue, capital and debts and remittances All receipts relating to current revenue transactions such as receipts from direct and indirect

taxes, fees and miscellaneous receipts are recorded in the revenue account together with the current expenditures The capital account, on the other hand, records all transactions of a capital nature Debt and remittances relate to public borrowings and remittances between the Central and State Governments and the Reserve Bank of India

All Government activities are divided into administrative and commercial activities Railways, posts and telegraphs, forests, irrigation, electricity schemes, road and transport and industrial schemes are grouped under commercial schemes, while such activities like education and health services are recorded as administrative activities

Sources of Data

In the present study, the estimates of National income, prepared by the Central Statistical Organisation, are utilized to derive saving and investment of Government administration and departmental commercial enterprises

The saving and investment estimates of Government non-financial companies are derived from their combined balance sheet and income-expenditure statements, prepared by the National Council by analysing the financial statements of almost all Government companies registered under the Indian Companies Act

The National Council also analysed financial statements of Government statutory corporations and constructed their combined income-expenditure statements and balance sheets which are used to derive their estimates of saving and investment It must be pointed out that non-financial statutory corporations could not be covered completely due to lack of adequate data but the omissions are not important The saving and investment estimates thus derived for the Government sector are shown in Table 5 1[1]

Summary of Findings

The estimated ratio of Government saving to income increased from 7 per cent in 1948-49 to 1950-51 to 9 per cent in 1951-52 to 1955-56 and 10 per cent in 1956 57 and 1957-58 The share of Government in total saving did not change significantly according to the indirect (or investment) estimates of total saving but declined appreciably according to the direct estimates, with the true relationship probably somewhere between the two The apparent anomaly of a moderate rise in the Government

[1] See also Chart 5 1

TABLE 51

AN ESTIMATE OF GOVERNMENT SAVING AND INVESTMENT IN INDIA, 1948-49 to 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Saving										
1 Gross	127	1563	1896	2734	1704	1551	1794	1992	2645	2704
2 Net	—257	998	1358	2089	959	810	957	1128	1663	1418
II Investment										
1 Gross	2009	2590	2632	2856	3205	3476	4265	5763	7060	9234
2 Net	1625	2025	2094	2211	2460	2735	3428	4899	6078	7948
III. Income	9860	10490	11380	12820	12020	12250	13090	14360	17330	18410

saving-income ratio associated with either no change or a decline in the Government share in total saving is basically due to the less rapid rise in the Government than in the Individuals' saving-income ratio and to the more rapid rise in Government than in other income (with Government income increasing from 11.4 per cent of the national income in 1948-49 to 16.1 per cent in 1957-58). The marginal Government saving-income ratio, derived from a simple linear current rupee relation of saving to income, is 0.12, while the corresponding constant rupee relation implies a slightly lower ratio.

It is interesting to note that the Government saving-income ratio in India seems somewhat lower than the average in a large number of other countries, both developed and under-developed, for which data are available.[1] For countries like Mexico, Japan and West Germany, the corresponding ratios are much higher. No official estimates are available for the United States, but unofficial estimates point to a lower Government saving-income ratio than in India for recent years.

Within the Government sector, only statutory corporations exhibited a clear upward trend in the level of saving over the period covered.

[1] Rough estimates for 15 primary producing countries were obtained from the *World Economic Survey, 1957*, United Nations, pp. 97-8, while estimates for Japan and West Germany were obtained from other sources previously referred to.

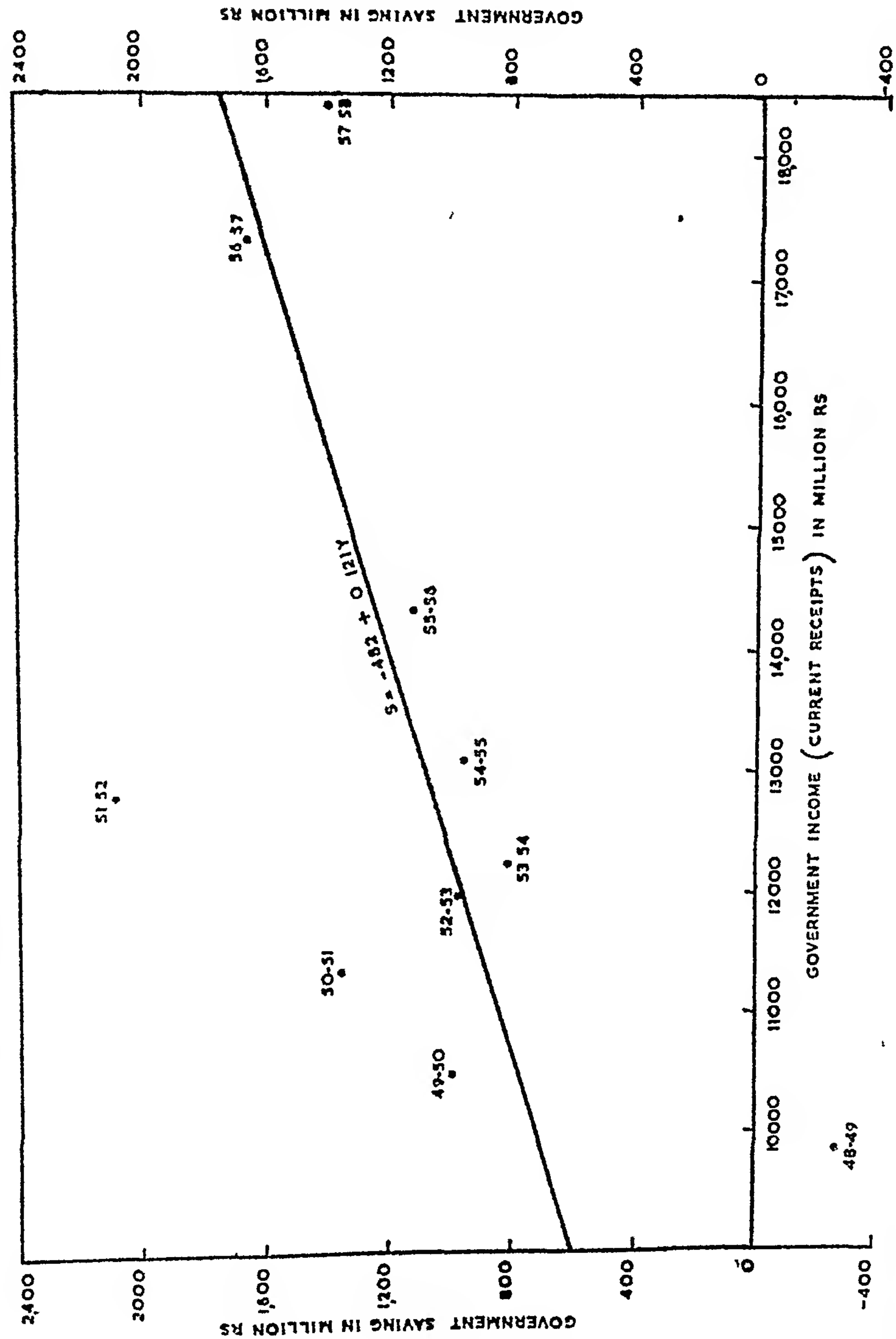


CHART 3 1

MARGINAL PROPENSITY TO SAVE OF GOVERNMENT

PART II

CHAPTER 1

INTRODUCTION

THIS PART ATTEMPTS to describe in detail the methods and techniques employed by the National Council in the derivation of saving and investment estimates presented in Part I The five chapters that follow as companions to the chapters in Part I discuss in detail the measurement of saving and investment of different sectors of the economy The nature of the source material on which the estimates are based is also critically examined along with the limitations so that the reliability of the estimates can be properly assessed The presentation of the data and the numbering of the tables are so arranged as to facilitate easy reference and further details are presented in footnotes to tables referred to in the chapters The inter-relationships are shown clearly in such a manner that the data can be rearranged for any other related analytical purpose in which the reader may be interested Further, the methods developed by the National Council in handling the basic data and building up estimates of saving for the Indian economy may be found useful by scholars engaged in similar studies in other countries where efforts are being made to collect systematically data on saving and investment

THE PERIOD OF STUDY

The estimates of saving and investment presented in this monograph relate to the ten-year period commencing 1 April 1948 The estimates of some components of saving for the year 1948-49 are derived as a difference between aggregate data for the years 1947-48 and 1948-49 Although the data for 1947-48 used for this purpose are very tenuous it was decided to use them as far as possible since the omission of such estimates could result in a loss of one year data in the whole series The data on some components of saving and investment for 1957-58 also are lacking in detail and for this reason all the available information for the previous years is used to derive the best possible estimates for 1957-58

The basic data from which the saving and investment estimates presented in this monograph are derived relate to different accounting periods such as calendar years, financial years agricultural years etc For the sake of consistency, in all cases where the basic data are available for periods other than financial years appropriate adjustments are made to derive the corresponding estimates for financial years Thus all the estimates of saving and investment presented in this monograph are converted to a uniform basis with respect to the accounting period

CONCEPTS OF SAVING

Three different concepts of saving have been discussed in the earlier part of this monograph, namely, the social accounting concept, the business accounting concept and the cash flow concept The fundamental difference among these concepts, as has already been noted, lies mainly in the treatment of such items as capital gains or losses, capital consumption allowances and accruals Attempts have been made in this study to derive usable estimates of capital consumption allowances and to eliminate as far as possible capital gains and losses

The most important form of capital gain (or loss) considered in this monograph is the inventory profit (or loss) It is understood that the majority of the Indian corporations follow the policy of valuing their stocks and stores on a first-in-first-out basis, at cost or market price whichever is lower In order to eliminate fictitious investment and profit or loss arising out of price changes reflected in the book value of inventories as a result of this policy, an *inventory valuation adjustment* is made The National Council has made such adjustment for corporate inventories details of which are given in Chapter 4 However, no such adjustment is attempted in the case of fixed or other assets as it is believed that corporations in India rarely write-up or write down such assets

The estimates of capital consumption allowances attributable to the Corporate and Government sectors are based on original cost and the straight-line method of depreciation For the more important Individuals' sector the basis followed (again straight-line) is intermediate between an original cost and replacement cost approach, probably closer to the latter for reasons discussed subsequently The replacement cost method could not be consistently used in this study in the absence of suitable price indices and other needed information

Limitations of Estimates

It may not be out of place here to mention the general limitations of the estimates leaving a more critical appraisal to the later chapters These limitations mostly stem from lack of reliable statistical information and are most substantial for net physical investment in the Individuals' sector. For this sector reasonably reliable data on non-corporate fixed assets and inventory investment are available only for manufacturing enterprises—both registered and unregistered The Census of Manufactures collects data on investment of registered enterprises every year whereas the National Sample Survey collected data for the unregistered category of enterprises for only one year This is true of Individuals' investment in other non-financial assets also where sample survey data are available for only one or two years

In this study, the estimates of Corporate saving and investment are based on blown-up data for selected samples of corporations and hence are subject to sampling errors which are discussed in detail in Chapter 4 These errors, however, are not likely to be so substantial as in the case of net physical investment of non-corporate business enterprises The estimates of saving and investment attributable to foreign controlled and portfolio companies are derived from the periodical surveys conducted by the Reserve Bank of India For the earlier years the data on retained profits of foreign subsidiaries are available only for a period of time covering 3 to 4 years and the yearly figures are derived by the National Council by making suitable adjustments although the reliability of such estimates may be somewhat questionable

Again, depreciation allowances could not be estimated in all cases due to non-availability of data and could rarely be estimated on a satisfactory basis. In the case of Government, the available data on depreciation are not entirely satisfactory In the much more important case of Individuals' non-financial assets attempts are, however, made to attain more satisfactory estimates of depreciation by roughly deriving the necessary figures of gross investment for earlier years and adopting suitable rates of depreciation depending on the assumed life of such assets These earlier figures for gross investment and assumed life may not actually reflect the true picture though they seem reasonable and preferable to available alternative sets of estimates

CHAPTER 2

ESTIMATES OF NATIONAL SAVING

NATIONAL SAVING CAN be arrived at by estimating total domestic investment and adding to it net foreign investment of India (measured from current account) since investment and saving must be equal at the aggregate level National saving can also be obtained by aggregating the savings of the three sectors (Individuals, Corporations and Government) into which the economy has been divided The former approach may be called the "Investment Approach" which provides an *indirect estimate* while the latter gives a *direct estimate* of saving

The investment approach involves estimation of total domestic investment of all economic units falling under any one of the three sectors as well as investment in kind made by foreign branches For the Government sector investment is separately estimated for administrative departments and departmental commercial enterprises of all public authorities, statutory corporations and registered companies In the case of the Corporate sector investment in buildings, plant and machinery and other fixed assets as well as stocks and stores is estimated separately for non-Government corporations and cooperatives For the Individuals' sector investment in all types of physical assets is separately identified although the coverage of inventory investment remains incomplete The detailed procedures adopted for measurement of investment of the different sectors are discussed in the subsequent chapters

The net foreign investment of India can be estimated either from the current account or the capital account of the balance of payments statistics which the Reserve Bank of India publishes regularly,[1] together with some adjustments for retained profits and investment of foreign companies and smuggled gold The current account of the balance of payments statistics shows the net surplus or deficit in current transactions which include goods and services, invisibles etc A surplus (+) on current

[1] *India's Balance of Payments*, Reserve Bank of India, Bombay

account stands for a net increase in the investment of India in foreign countries while a deficit (–) represents a net decrease

The capital account of the balance of payments statistics records all transactions on account of private short-term and long-term capital movements, official and banking long-term loans, other long-term capital transfers etc The net balance on capital account represents the net change in the country's foreign assets and liabilities A credit balance on capital account means an inflow (+) of foreign resources and may arise because of a net decrease in the country's net foreign assets or a net increase in the country's foreign liabilities or both Since a credit balance represents a net inflow of foreign resources it is to be deducted from total domestic investment to arrive at net National saving The converse is the case with a debit balance which means an outflow (–) of domestic resources

The net balance of current and capital accounts of the balance of payments statistics rarely tally, the discrepancy arising mainly because of the difficulty in consistently following a double entry rule in the case of transactions entering international trade and capital movements The two accounts are conventionally reconciled by an entry known as the *errors and omissions* In this study the net balance on capital account has been made use of to arrive at net foreign investment but no account has been taken of the errors and omissions, for nothing is known as to whether such errors and omissions are associated with the current account or the capital account

The balance of payments statistics do not record all kinds of transactions and hence necessary adjustments have to be made to provide for unreported types of foreign assets and liabilities The retained profits of foreign controlled companies and foreign branches and investment in kind by the latter are three of the important items which do not appear in the regular balance of payments records However, data on such investment items are available in the reports published by the Reserve Bank of India[1] These data are made use of in adjusting net foreign investment estimated from the capital account of the balance of payments statistics

The amount of gold that is smuggled into India from Persian Gulf ports and other parts of the world every year does not also find a place in the published statistics on balance of payments To the extent that a part of the domestic saving has been utilized to purchase gold abroad

[1] *Survey of India's Foreign Liabilities and Assets*, Reserve Bank of India, Bombay

and smuggle it into India, the value of smuggled gold represents an outflow of domestic resources In the past, two or three estimates were made of the amount of gold smuggled into India but the latest estimates made by the Reserve Bank of India[1] appear the most reliable and hence are used in this study The net capital inflows and outflows estimated from the capital account in the manner described for the period 1948-49 through 1957-58 are shown in Table 2 1 1

For the purpose of estimating National saving through the direct approach the savings of the different sectors are derived independently and aggregated Government saving is estimated from net surplus on current account of Government administrative departments, departmental commercial enterprises, and retained profits of Government statutory corporations and registered companies Corporate saving is derived by pooling up the retained earnings of the non-Government corporations and the cooperatives but excluding retained earnings of the foreign branches The retained earnings attributable to foreign controlled companies are merged with domestic Corporate saving but shown separately in a footnote Saving of the Individuals' sector is obtained by netting out the changes in Individuals' assets and their liabilities to the other two sectors Individuals' liabilities to foreigners are not taken into account due to non-availability of data, but such liabilities, however, are not likely to be of significant magnitude

National saving, it may be pointed out, comprises saving of Indian nationals in assets held abroad as well as in the country But the aggregate saving estimates obtained by adding the savings of different sectors in this study do not cover completely Individuals' saving in assets held abroad or foreign Individuals' saving in Indian assets However, the omissions are not likely to affect the saving estimates to any appreciable extent

The National Council estimates of net National saving as well as those of the Reserve Bank of India, the most recent estimates available for comparison, are given in Table 2 2 1 It is interesting to note that the estimates of the National Council and the Reserve Bank for the years 1950-51 and 1951-52 are very close For the First Plan period as a whole the estimates of the Reserve Bank are far below the direct and indirect estimates of the National Council, much more in the case of the latter The Reserve Bank estimate for the year 1956-57, however, lies in between

[1] "Estimates of Saving in the Indian Economy", *Reserve Bank of India Bulletin*, March 1960, Bombay

TABLE 211

NET CAPITAL INFLOW (+) OR OUTFLOW (—), 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Net balance on capital account	2458	545	—322	2076	—345	—497	61	47	3107	4368
II Retained earnings of foreign branches	82	82	82	82	84	110	113	—12	119	60
III Investment in kind by foreign branches	155	155	155	155	155	136	77	79	92	114
IV Value of smuggled gold	140	140	143	284	124	80	59	72	172	271
V Net Inflow (+) or Outflow (—) [(I+II+III)—(IV)]	2555	551	—228	2029	—230	—331	192	66	3146	4271

Sources Item (I) *India's Balance of Payments*, Reserve Bank of India, Bombay
Items (II) and (III) *Survey of India's Foreign Liabilities and Assets*, Reserve Bank of India, Bombay
Item (IV) "Estimates of Saving in the Indian Economy", *Reserve Bank of India Bulletin*, March 1960, Bombay

Note Retained earnings of foreign controlled companies are shown under retained earnings of non-Government corporations and the figures stand as follows

(In million rupees)

1948-49	*1949-50*	*1950-51*	*1951-52*	*1952-53*	*1953-54*	*1954-55*	*1955-56*	*1956-57*	*1957-58*
48	*48*	*48*	*48*	*42*	*26*	*45*	*69*	*50*	*36*

TABLE 22.1

ESTIMATES OF NET NATIONAL SAVING IN INDIA BY THE NCAER AND THE RESERVE BANK, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I NCAER indirect estimate	3204	5953	6238	5097	6867	7173	8416	11346	10515	12112
II NCAER direct estimate	N A	4358	6305	5244	6393	6169	7345	10294	9285	10708
III Reserve Bank estimate	N A	N A	6530	5025	5867	5615	6372	8143	9763	7906

N A = Not available

the two estimates of the National Council For the last year in the series 1957-58,' the National Council estimates, as compared to the Reserve Bank estimates, are higher by Rs 2,800 million and Rs 4,200 million respectively for the direct and indirect estimates

CHAPTER 3

ESTIMATES OF INDIVIDUALS' SAVING

FOR THE PURPOSE of this monograph Individuals' sector comprises farm and non-farm households, unincorporated business enterprises, non-profit organizations etc This study could not show separately saving and investment of non-profit organizations such as religious endowments for want of data although their importance in the Indian economy is fully recognized However, business assets of farm and non-farm unincorporated enterprises, though only to a limited extent in the case of the latter, are estimated separately

The various items of assets and liabilities of Individuals are separately identified for estimating their saving The difference between net change in their assets and liabilities, excluding valuation changes and transfer items, is taken as a measure of saving A list of assets and liabilities considered in estimating Individuals' saving is given in Chapter 3 of Part I

The acquisition of assets by Individuals measured net of the corres ponding liabilities by different types of assets such as investment in residential construction less mortgages on houses etc, will be more useful for certain analytical purposes Such data could not be provided in this study for lack of information on the nature of Individuals' liabilities to the Government and the Corporate sectors However, a detailed breakdown of Individuals' liabilities to the sub sectors of the Corporate sector are estimated and shown in the tables The net changes in total liabilities are deducted from the net changes in total assests in order to arrive at Individuals' saving

INDIVIDUALS' FINANCIAL ASSETS

Currency

The estimates of Individuals' saving in the form of currency are measured as annual variations in the currency held by them The currency holdings of Individuals are derived by deducting from the total

currency in circulation, the currency holdings of the Government and the Corporate sectors The total currency in circulation consists of Indian currency notes, rupee coins and small coins and *Hali Sicca* currency The Reserve Bank publishes particulars about these currencies in circulation in its annual reports[1] The *Hali Sicca* currency was issued by the former State Government of Hyderabad but it ceased to be legal tender from 1 April 1955 Particulars of the *Hali Sicca* currency in circulation prior to 1955 are obtained by the National Council from the Department of Finance, Government of Andhra Pradesh[2]

The total currency holdings of the Government sector represent the holdings of the Central and State Governments, the Local Authorities, the Government non-financial and financial statutory corporations and the Government registered companies The balances of Central and State Governments held at the Government treasuries are obtained from the data published in the *Reports on Currency and Finance* The Reserve Bank data on Survey of Borrowings and Investments of Local Authorities[3] are utilized to estimate currency held by Local Authorities for the period 1950-51 to 1957-58 The National Council made rough estimates of these holdings for the years 1948-49 and 1949-50 The currency holdings of the Government non-financial statutory corporations could be estimated only for two of such corporations, namely, the Air India International and the Indian Airlines Corporation, since data are not available for others The currency holdings of other non-financial corporations are not likely to be significant

The Reserve Bank of India, the State Bank of India, the Life Insurance Corporation of India, and the Industrial Finance Corporations of the State and Central Governments represent the Government financial statutory corporations Of these, the currency holdings of the Reserve Bank of India are not taken into account as the published estimates of total currency in circulation exclude them The *Statistical Tables Relating to Banks in India* provide data on the cash holdings of the State Bank of India[4] while estimates of the Life Insurance Corporation of India are derived from its published reports[5] The holdings of currency by the

[1] *Report on Currency and Finance*, Reserve Bank of India, Bombay

[2] *Vide* Letter from the Department of Finance, Andhra Pradesh Government, dated 9 April 1959

[3] *Reserve Bank of India Bulletins*, April 1958 and April 1960, Reserve Bank of India, Bombay

[4] *Statistical Tables Relating to Banks in India*, Reserve Bank of India Bombay

[5] *Report and Accounts of the Life Insurance Corporation of India*, Bombay

Industrial Finance Corporation and the State Financial Corporations appear to be negligible The currency held by Government registered companies is estimated from the combined balance sheet of such companies which the National Council prepared

The particulars of currency holdings of all non Government non financial corporations excluding foreign branches are obtained from the combined balance sheet which the National Council prepared on the basis of blown-up data of sample companies Currency held by foreign branches is estimated on the assumption that it constitutes 18 5 per cent of the currency holdings of the large non-financial public limited companies[1]

The banking statistics published by the Reserve Bank of India provide a measure of currency holdings of all Indian and foreign scheduled and non-scheduled banks in the Indian Union These figures given for calendar years are adjusted to financial years for arriving at the currency holdings of the banks

The estimates of currency holdings of insurance companies are not separately available and hence are derived from the data on cash and deposits of insurance companies given in their balance sheets The combined estimates of cash and deposits of the Indian insurance companies are first adjusted to represent their Indian business as the estimates of cash and deposits given in their balance sheets relate to their business both in India and abroad The data regarding business within and outside India of the Life Insurance Corporation for the years 1956-57 and 1957-58 are used for this purpose For the non-Indian insurance companies however data on cash and deposits are available for only a few years Therefore the estimates for other years are derived on the basis of total assets of these companies by applying the ratio of cash and deposits to the total assets for the years for which data regarding this breakdown is available The cash and deposits of provident societies as given in the summary of their balance sheets are assumed to represent only their business in India

The currency holdings of all insurance companies and provident societies are then estimated from their total holdings of cash and deposits by multiplying the latter by the corresponding ratios of currency to currency plus deposits of all non-Government non-financial companies and finally

[1] N S R Sastry and K A Antony "Capital Formation in the Corporate Business Sector in India' *Papers on National Income and Allied Topics* Volume I Indian Conference on Research in National Income 1960.

the estimates are adjusted to financial years It may be noted that the currency holdings of the Life Insurance Corporation of India and the provident societies are included in the Government sector estimates since the nationalization of life insurance business in India in September 1956

The currency holdings of the loan and investment and other financial companies are derived by applying the ratio of their paid-up capital to the paid-up capital of the non-Government non-financial companies to the currency holdings of the latter

The currency holdings of the cooperative credit societies are obtained directly from the publication on Cooperative Movement in India The estimates of currency held by non credit societies and land mortgage banks, for which data on currency holdings are not separately available, are obtained by multiplying their aggregate holdings of currency, bank deposits and other investments by the ratio of the currency holdings of the credit societies to their total holdings of currency, deposits etc

The variations in the currency holdings of Individuals, adjusted for variations in the circulation of small coins, are taken to represent Individuals saving in the form of currency The estimates are presented in Table 3 1 1

The currency holdings of the three different sectors are shown in Tables 3 1 2 to 3 1 4 Finally, Table 3 1 5 provides a comparison of the National Council estimates with those of the Reserve Bank of India which suggests that they are not much different although the Bank estimates are at a somewhat higher level It may be pointed out that the enormous drop in currency holdings in 1951-52 might be due to the after effects of the Korean boom whereas the even larger jump in 1955 56 might be attributed to deficit financing on the part of the Government

Deposits

The estimates of Individuals saving in the form of deposits presented in this chapter represent Individuals' deposits with scheduled banks, non-scheduled banks, cooperative banks and cooperative societies The derivation of the estimates of deposits with these financial institutions is discussed below

The Reserve Bank of India published detailed information on the ownership of the deposits with scheduled banks in its bulletins, July 1959 and July 1960[1] The fairly comprehensive information provided in the

[1] *Reserve Bank of India Bulletins*, July 1959 and July 1960, Bombay

TABLE 3.11

INDIVIDUALS' SAVING IN THE FORM OF CURRENCY HOLDINGS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Total currency in circulation*[1]	*13497*	*12908*	*13827*	*12594*	*12443*	*12709*	*13514*	*15476*	*16015*	*16525*
1 India and *Hali Sicca* notes	12197	11582	12386	11283	11191	11502	12364	14242	14832	15360
2 India and *Hali Sicca* rupee coins	1300	1326	1441	1311	1252	1207	1150	1234	1183	1165
II *Currency holdings of the Government sector*	54	56	88	85	127	96	83	108	187	246
III *Currency holdings of the Corporate sector*	743	726	777	756	703	722	834	778	773	838
IV *Currency holdings of all foreign branches*	60	46	50	51	49	46	51	54	52	50
V *Currency holdings of Individuals* [(I)—(II+III+IV)]	12640	12090	12912	11702	11559	11845	12546	14536	15003	15391
VI *Net changes in Individuals currency holdings* (ΔV)	N A	–560	832	—1210	—143	286	701	1990	467	388
VII *Net changes in Individuals holdings of small coins*	N A	—22	—32	—30	—41	—32	—11	15	1	7

VIII	*Individuals' saving in the form of currency holdings* (VI+VII)	N A	—582	800	—1240	—184	254	690	2005	471	394

[a] Total currency in circulation does not include small coins
N A = Not available
Sources Items (I) and (VII) *Report on Currency and Finance*, Reserve Bank of India, Bombay
Item (II) : Table 3 1 2
Item (III) : Table 3 1 3
Item (IV) · Table 3 1 4

TABLE 3.12

CURRENCY HOLDINGS OF THE GOVERNMENT SECTOR, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Currency holdings of Central and State Governments	13	16	44	37	73	42	28	11	53	42
II Currency holdings of local authorities	40	40	42	47	52	52	52	60	64	77
III Currency holdings of Government registered companies	1	N	2	1	2	2	2	3	4	6
IV Currency holdings of Government statutory non-financial corporations	N A	N A	N A	N A	N A	N A	1	1	2	2
V Currency holdings of Government statutory financial corporations	N A	N A	N A	N A	N A	N A	N A	33	64	119
VI Total	54	56	88	85	127	96	83	108	187	246

* Rough estimate
N=Nil or negligible
N A =Not applicable

Sources Item (I) · *Report on Currency and Finance*, Reserve Bank of India, Bombay
Item (II) *Reserve Bank of India Bulletins*, April 1958 and April 1960, Bombay
Item (III) . NCAER analysis of financial statements of Government registered companies
Item (IV) NCAER analysis of financial statements of Government statutory non-financial corporations
Item (V) *Statistical Tables Relating to Banks in India*, Reserve Bank of India, Bombay
Report and Accounts of the Life Insurance Corporation of India, Bombay
Annual Reports of the Industrial Finance Corporation of India and State Financial Corporations

TABLE 313

CURRENCY HOLDINGS OF THE CORPORATE SECTOR, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Currency holdings of non-Government non-financial corporations	122	140	150	161	166	181	191	176	178	182
II Currency holdings of non-Government financial corporations	531	492	517	482	532	434	440	437	438	454
III Currency holdings of cooperatives	90[a]	94	110	113	110	107	203	165	157	202
IV Total	743	726	777	756	708	722	834	778	773	838

[a] Rough estimate

Sources Item (I) NCAER analysis of corporate financial statements

Item (II) *Statistical Tables Relating to Banks in India*, Reserve Bank of India, Bombay

Indian Insurance Year Book, Controller of Insurance, Simla

Item (III) *Statistical Statements Relating to the Cooperative Movement in India*, Reserve Bank of India, Bombay

TABLE 3.14

CURRENCY HOLDINGS OF ALL FOREIGN BRANCHES, 1948-49 TO 1957-58

(In million rupees)

		1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I	Currency holdings of non-financial corporations	15	18	18	20	20	20	22	19	21	20
II	Currency holdings of financial corporations	45	28	32	31	29	26	29	35	31	30
III	Total	60	46	50	51	49	46	51	54	52	50

Sources Item (I) Estimated as 18 5 per cent of the currency holdings of public limited companies
Item (II) *Statistical Tables Relating to Banks in India*, Reserve Bank of India, Bombay
Indian Insurance Year Book, Controller of Insurance, Simla

TABLE 315

ESTIMATES OF INDIVIDUALS' CURRENCY HOLDINGS BY THE NCAER AND THE RESERVE BANK, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I NCAER estimate	N A	—582	800	—1240	—184	254	690	2005	471	394
II Reserve Bank estimate	N A	N A	843	—1158	—174	302	651	2061	490	445

N A =Not available

two bulletins was used by the National Council with some adjustments to arrive at Individuals' saving in the form of deposits with scheduled banks

The above bulletins supply information about type of deposits under the three categories, namely, time, demand and savings and also identify their ownership with specific depositor groups wherever applicable and practicable The details of the breakdowns adopted by the Reserve Bank are as follows. Government and quasi-Government bodies, manufacturing mining and trading concerns with a further split-up into corporations and unincorporated enterprises including sole proprietorships, financial concerns with a further split-up into banking, insurance etc, plantations public utilities and personal deposits

The above particulars of ownership of deposits provided by the Reserve Bank are utilized as the basis for the regrouping of ownership to fall in line with the classification of the three sectors, Government, Corporations and Individuals, which is used for analytical purposes in this study The deposits held by Government and quasi-Government bodies are taken to represent total deposits of the Government sector The deposits of manufacturing mining and trading concerns excluding unincorporated enterprises, sole proprietorships financial concerns and public utilities are taken to constitute deposits of the Corporate sector Deposits of unincorporated enterprises and sole proprietorships and personal deposits are relegated to the Individuals' sector The deposits under the head *unclassified* which turned out to be not more than Rs 500 in each case are assumed to apply to the Individuals' sector It is also assumed that deposits classified as *others* are held by foreigners

The Reserve Bank has been providing information in its publication on *Trend and Progress of Banking in India* about ownership of deposits in non-scheduled banks since 1948, with some details on type of deposits However, in the earlier years this information is not as comprehensive as for the latter period considered in this study The National Council worked out suitable ratios to identify ownership with type of deposits using the data available for the latter period and applied the ratios to the basic data to estimate deposits of the three sectors, namely, Government, Corporations and Individuals, for the earlier period

The estimates of deposit holdings of the different sectors of the economy derived in the above manner are blown up to represent the entire banking system as the coverage of the Reserve Bank survey of ownership of deposits is not complete For this purpose, the Reserve Bank data on total deposits of all Indian scheduled and non scheduled banks relating to

their business in the Indian Union as well as data on all foreign banks operating in the country are used[1] Finally, the calendar year estimates are adjusted to financial years and Individuals' saving is estimated as a change in the deposit holdings of the Individuals' sector

The loans and advances made by the banking system to Individuals are not considered while estimating their deposit holdings since all types of liabilities are separately estimated and deducted from total assets to derive total net saving of Individuals The estimates of saving in bank deposits, presented in Tables 3 2 1 to 3 2 4, are therefore gross of increases in bank advances to Individuals

The estimates of Individuals' saving in the form of deposits with co-operative institutions are derived from the Reserve Bank publication on Cooperative Movement in India[2] The cooperative institutions are grouped into three broad categories, namely, credit societies, non-credit societies and land mortgage banks The deposits held by Individuals in different types of cooperative institutions are pooled and annual variations after making appropriate adjustments for the accounting period, are derived to represent Individuals' saving It may be mentioned that these estimates also are gross of liabilities to cooperatives

A comparison of the National Council estimates of Individuals' saving in bank deposits with the estimates of the Reserve Bank is provided in Table 3 2 5 The estimates of the National Council appear to be somewhat at a higher level as compared to the Reserve Bank estimates except for two years, 1950-51 and 1952-53, in the whole series The Reserve Bank does not seem to have blown up its estimates of deposits derived from its sample survey data to cover the whole banking system This perhaps explains the comparatively lower level of the Bank estimates although the two series do not differ greatly

Gold and Silver

An important item of saving by Indian households is represented by net purchase of gold and silver which are mostly used in the form of ornaments and articles of decorative value The traditional Indian sentiment attached to ornaments partly explains substantial purchases of gold and silver by the households Further, in the past and even now to some extent, lack of adequate banking facilities has provided a direct induce-

[1] *Statistical Tables Relating to Banks in India*

[2] *Statistical Statements Relating to the Cooperative Movement in India* Reserve Bank of India, Bombay

TABLE 321

INDIVIDUALS' SAVING IN THE FORM OF DEPOSITS WITH BANKS AND COOPERATIVES, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Changes in deposits with scheduled banks	N A	—355	—26	—225	24	96	442	640	381	759
II Changes in deposits with non-scheduled banks	N A	—23	5	—40	—61	—23	21	40	2	—143
III Changes in deposits with cooperatives	N A	50[a]	52	65	56	51	113	176	195	43
IV Total	N A	—328	31	—200	19	124	576	856	578	659

[a] Rough estimate
N A =Not available
Sources Items (I), (II), and (III) The estimates are derived as year-to-year changes from the corresponding level figures given in Tables 3 2 2 to 3 2 4 and adjusted to financial years

TABLE 3.22

OWNERSHIP OF DEPOSITS OF ALL SCHEDULED BANKS IN INDIA, 1948 TO 1957

(In million rupees)

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
I Deposit holdings of Government sector	676	621	661	665	630	658	862	799	1126	2316
II Deposit holdings of Corporate sector	1906	1748	1812	1789	1691	1657	1898	2222	2001	2429
III Deposit holdings of Individuals' sector	6012	5516	5584	5276	5302	5319	5652	6420	6675	7434
IV Other deposits	696	639	674	670	689	740	857	998	1055	1451
V Total	9290	8525	8731	8400	8312	8375	9269	10439	10857	13630

Sources 1 *Trend and Progress of Banking in India*, Reserve Bank of India, Bombay
2 *Statistical Tables Relating to Banks in India*, Reserve Bank of India, Bombay
3 *Reserve Bank of India Bulletins*, June 1959 and July 1960, Bombay

TABLE 3.23

OWNERSHIP OF DEPOSITS OF ALL NON-SCHEDULED BANKS IN INDIA, 1948 TO 1957

(In million rupees)

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
I Deposit holdings of Government sector	21	20	21	42	27	85	98	95	74	36
II Deposit holdings of Corporate sector	84	79	81	70	57	49	48	50	52	34
III Deposit holdings of Individuals' sector	622	586	603	572	502	466	482	519	569	426
IV Other deposits	14	14	14	N	39	34	40	37	42	21
V Total	741	699	719	684	625	634	668	701	737	517

N=Nil or negligible

Sources 1 *Trend and Progress of Banking in India*, Reserve Bank of India, Bombay
2 *Statistical Tables Relating to Banks in India*, Reserve Bank of India, Bombay
3 *Reserve Bank of India Bulletins*, June 1959 and July 1960, Bombay

TABLE 324

INDIVIDUALS' DEPOSITS WITH COOPERATIVE BANKS AND SOCIETIES, 1948-49 TO 1957-58 [a]

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Deposits with credit societies	797	724	771	803	833	876	1003	1158	1310	1298
II Deposits with non-credit societies	57	99	133	161	184	189	196	222	277	277
III Deposits with central and primary land mortgage banks	1	1	1	1	2	4	4	13	4	7
IV Total	855	824	905	965	1019	1069	1203	1393	1591	1582

[a] Relates to agricultural year ending 30 June

Source *Statistical Statements Relating to the Cooperative Movement in India*, Reserve Bank of India, Bombay

TABLE 3.25

ESTIMATES OF INDIVIDUALS' BANK DEPOSITS BY THE NCAER AND THE RESERVE BANK, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I NCAER estimate	N A	—328	31	—200	19	124	576	856	578	659
II Reserve Bank estimate	N A	N A	80	—111	44	66	342	628	533	482

N A = Not available

ment for people to save their wealth in gold and silver. The two factors are of course, not completely independent

The annual *Reports on Currency and Finance* published by the Reserve Bank give information about domestic output of gold and silver in terms of quantity for calendar years The quantity data are adjusted by the National Council to financial years and are valued at the annual average spot price of gold and silver at Bombay The figures are finally adjusted for the total value of smuggled gold and exports and imports, although the latter are negligible to arrive at the net absorption of the metals The total net absorption thus derived is assumed to represent Individuals' saving although some gold and silver purchases are made by the Corporate sector also for industrial uses but the latter are not likely to be significant

The domestic production of gold is only a fraction (about one fourth) of the gold which is believed to be smuggled into India annually from Persian Gulf ports and other parts of the world The problem of estimating the value of gold thus smuggled in is indeed an important one In the past, some attempts were made by individual researchers to estimate the total quantity or value of gold smuggled into the country but unfortunately none of the estimates seems to be entirely satisfactory The estimates provided by the Reserve Bank in its research study of saving in India appear the best possible and are utilized in this monograph

The question of smuggling gold out of India is not relevant at all since the external price always remained far below the internal price during the period under study The data on net absorption of gold and silver by Individuals are shown in Table 3 3 1

Life Insurance

Life insurance is one of the important items of Individuals' contractual saving and ranks only next to provident funds and pension funds The characteristic of a contractual saving is that the individual concerned agrees either voluntarily or by obligation of service terms to make regular payments to a fund over a period of time, subject to the condition that he would be paid back the amount remitted by him together with or without interest and profits at a later date The time of repayment, the mode and other details are also usually prescribed in rules and regulations governing the fund In the case of life insurance the nature of the responsibility which a company assumes for the individual concerned depends upon the conditions under which the policy has been issued by the company A

TABLE 33.1

INDIVIDUALS' SAVING IN THE FORM OF GOLD AND SILVER, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Net absorption of gold*	*194*	*193*	*207*	*362*	*181*	*133*	*115*	*126*	*230*	*331*
1 Domestic production	54	53	62	67	57	52	55	53	56	51
2 Imports	N	N	2	11	N	N	1	1	2	9
3 Smuggled gold	140 [a]	140 [a]	143	284	124	81	59	72	172	271
II *Net absorption of silver*	8	N	N	1	1	1	1	1	1	1
III *Individuals' saving in gold and silver (I+II)*	202	193	207	363	182	134	116	127	231	332

[a] Rough estimate

N=Nil or negligible

Sources 1 *Report on Currency and Finance*, Reserve Bank of India, Bombay

2 "Estimates of Saving in the Indian Economy", *Reserve Bank of India Bulletin*, March 1960, Bombay

life insurance policy contemplates insurance against one's life or against a specific contingency and premia are paid by the insured over a particular period at the expiry of which the company discharges its legal obligation to the insured

The net increase in liabilities of all insurance companies to the policy holders in respect of their life insurance business provides a measure of Individuals' saving in the form of life insurance The estimates of Individuals' saving in life insurance can be obtained either from the balance sheet or the revenue account of all insurance companies The annual reports of the Controller of Insurance[1] and the Life Insurance Corporation of India[2] provide relevant statistical material and give statements of the combined balance sheets and revenue accounts of all Indian and non-Indian insurance companies classified according to the type of business The net increase in life insurance funds can be derived as year-to-year change in the corresponding balance sheet items or from the life insurance revenue accounts The latter provide particulars of income and expenditure of the insurance companies in respect of their life insurance business only The surplus of the total premium income and other incomes net of payments over the current expenses including charges on reserves as given in life insurance revenue accounts represents the additions to life insurance fund every year As a matter of accounting procedure the cumulative estimates at the end of each year are transferred to the corresponding balance sheet as on 31 December However, minor discrepancies exist between the estimates given in the published balance sheet and those reported in the revenue account The saving estimates presented here are directly derived from the life insurance revenue accounts while the balance sheet data are used only for checking purposes

In this connection it must be mentioned that business done by provident societies is assumed to represent wholly life business although this might not be entirely correct The business of such provident societies constituted only a small fraction of the total business done by the life insurance companies and therefore it was not considered worthwhile to separate their business into life and non-life parts

The life insurance revenue accounts of Indian insurance companies prior to nationalization, as given in the published reports by the Controller of Insurance, relate to their total business in India as well as abroad The estimates of life insurance funds are therefore adjusted to

[1] *Indian Insurance Year Book*, Controller of Insurance, Simla
[2] *Annual Report and Accounts of Life Insurance Corporation of India*

represent only the net liabilities of insurance companies to policy holders in India The ratio of gross premium income written direct in India to the premium income in respect of total business of all Indian insurance companies is used for this purpose For the year 1956-57 and 1957-58 the total life insurance funds attributable to the resident policy holders are obtained directly from the annual reports of the Life Insurance Corporation of India which give separate figures for insurance business done in India and abroad

The variations in the estimates of life insurance funds, as derived above and adjusted to financial years, represent Individuals' saving in the form of life insurance The estimates presented in Table 3 4.1, it should be noted, are gross of all types of liabilities to insurance companies since the liabilities of the Individuals sector have been dealt with separately

A comparison of the National Council estimates of Individuals' saving in life insurance with those of the Reserve Bank of India is given in Table 3 4 2 The National Council estimates show a clear upward trend whereas the Reserve Bank estimates show some fluctuations

Provident Funds

The most important item of Individuals' contractual saving is represented by their contributions to provident funds The underlying principle of a provident fund scheme is that an employee pays regularly a specified amount, usually prescribed as a percentage of his salary, to a fund maintained for the common benefit of employees within the same service In many services the employer also pays his contribution to the fund which, in most cases, equals the amount paid by the employee The employee and the employer make their contributions to provident funds regularly until such time the former ceases to remain in the service of the latter The termination of service may occur through regular retirement or voluntary resignation or any other contingency On retirement from service, the employee is entitled to the full amount contributed by him to the fund during the period of his service together with such interest as might accrue on the amounts paid by him as well as the matching contributions made by his employer, although in some cases the employer's contributions can be claimed by the beneficiary only if he had put in a specified period of service

The administration of provident funds is usually vested in a trust board representing the interests of the employer and the employees An employee can borrow money from the funds standing to his credit

TABLE 34.1

INDIVIDUALS' SAVING IN THE FORM OF LIFE INSURANCE, 1948-49 TO 1957-58

(In million rupees)

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
I Increase in total life insurance fund of all Indian insurers	181	188	192	148	218	249	278	282	258	307
II Proportionate increase in life insurance fund in respect of business done in India by all Indian insurers	164	166	170	136	199	226	253	251	242	280
III Increase in life insurance fund of all non-Indian insurers	8	7	16	15	20	26	20	23	(a)	(a)
IV Increase in insurance fund of all provident societies	1	1	1	1	1	1	1	1	(a)	(a)
V Total increase in insurance fund (II+III+IV)	173	174	187	152	220	253	274	275	242	280
VI. Individuals' saving in life insurance adjusted to financial years	173	177	178	169	228	258	274	267	252	301

(a) Merged with the Life Insurance Corporation of India since its nationalization in September 1956.

Sources. 1 *Indian Insurance Year Book*, Controller of Insurance, Simla

2 *Report and Accounts of the Life Insurance Corporation of India*, Bombay

TABLE 3.4.2

ESTIMATES OF INDIVIDUALS' SAVING IN LIFE INSURANCE BY THE NCAER AND THE RESERVE BANK, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I NCAER estimate	173	177	178	169	228	258	274	267	252	301
II Reserve Bank estimate	N A.	N A.	94	284	218	249	273	155	324	210

N A =Not available.

subject to some rules and regulations The general rules and regulations governing provident fund schemes are mutually agreed upon and, in fact, some regulations are also stipulated by the Government to ensure proper management of the trust funds which are exempt from income tax

The total contributions made by the employees and the employers together with net accrued interest i e net of expenses less the amounts advanced to them represent Individuals' saving in the form of provident funds However, in this study the amount of interest accrued to the employees could not be taken into account in the measurement of saving for want of reliable data

Government Employees The data regarding provident fund contributions of the Central and State Government employees are obtained from the Office of the Comptroller and Auditor General of India The data, except for the last year in the series are available in published reports[1] while those for the last year are obtained through the courtesy of the Office of the Comptroller and Auditor General The reports provide information about the provident funds of the employees of the Central and State Governments separately The accounts presented show the opening and closing balances the total receipts and repayments and the interest paid during the year The National Council estimated the net contributions to provident funds as the difference between the receipts and the repayments made during the year In this connection, it should be mentioned that the estimates upto 1955-56 relate only to the employees of Part A and Part B States while they extend to employees of all the States for the subsequent period

The provident funds of employees of Local Authorities could be covered only for the category of those working in educational institutions No efforts could be made to estimate the funds of all other categories of employees but the amounts involved are not likely to be of any significant magnitude

Industrial Workers The Government of India passed legislation in 1948 making it compulsory for the employers of coal mines to institute provident fund schemes for the benefit of their workers The Act prescribed the minimum size of the mining establishment which should provide provident funds for its workers whose salaries fall below a specified minimum The provident fund schemes obtaining in the coal mines are supervised by the Coal Mines' Provident Fund Commissioner with whom the employers should deposit the funds that accumulate to the credit

[1] *Combined Finance and Revenue Accounts of the Central and State Governments in India*, Office of the Comptroller and Auditor General of India, New Delhi

of the employees The Commissioner administers the funds, makes investments and maintains operating accounts The periodical reports published by the Commissioner provide detailed information about the opening and closing balances, the current receipts, withdrawals, repayments etc[1] The National Council used all the available published data together with some additional information obtained through the courtesy of the Commissioner to estimate the provident funds of the coal mine workers from 1948-49 through 1957-58

The Government of India passed comprehensive legislation in 1952 providing provident funds for employees in six major industries The Act prescribed that employers of the *specified* industries should formulate schemes for the benefit of their employees provided they came under the purview of the Act In other words, the employer was required to institute a provident fund scheme if he employed a minimum number of workers which was 50 at the commencement of the Act Since its inception the Act underwent significant amendments whereby its coverage was extended By the 1953 amendment the Act was made applicable to factories employing even less than 50 workers Secondly, the Government is empowered to apply the provisions of the Act to any factory establishment, although it does not belong to the industries to which the Act applies, where the employer and the majority of the employees agree to come under the Act The administration of the Act is vested in a Commissioner with whom the funds are deposited The Commissioner maintains operating accounts of the funds and publishes annual reports[2] which review the financial position

In this connection, it must be noted that an establishment belonging to a *specified* industry can seek exemption from its application provided the Commissioner is satisfied that the management concerned has been maintaining a provident fund scheme which is considered more beneficial to the employees than the one contemplated by the Act The provident funds of such exempt categories of establishments are actually administered by the employers or trust boards but required by law to submit periodically operating statements to the Commissioner The Commissioner consolidates the information about the funds directly managed by him or *unexempt* categories and provident funds obtaining in the *exempt* categories

[1] *Annual Report of the Working of the Coal Mines Provident Fund*, Ministry of Labour and Employment, Government of India

[2] *Report on the Working of the Employees' Provident Funds Scheme*, The Central Board of Trustees, Employees' Provident Fund, Ministry of Labour and Employment, Government of India

The National Council consulted the annual reports of the Commissioner since the inception of the Act and derived estimates of provident funds of workers both in the exempt and unexempt categories of establishments The data for the last year in the series and additional details for the earlier period have been obtained by the National Council through the courtesy of the Commissioner

The Act does not apply to employees who receive more than Rs 500 per month and the data provided by the Commissioner do not include the provident funds of such employees The estimates presented in this study, therefore, tend to understate Individuals' saving

Employees of Educational Institutions The saving in provident funds of employees of educational institutions is estimated from the information available about the salaries paid to them and an assumed rate of their contributions to provident funds The reports published by the Ministry of Education[1] provide separately data on salaries paid to teaching staff in various schools, colleges, universities and research institutions and data relating to salaries paid to administrative staff in colleges and universities only It appears that about $12\frac{1}{2}$ per cent of the salary of the employees represents their saving in provident funds and it is shared equally by the employer and the employee The National Council estimated the gross contributions to provident funds of all employees in educational institutions on the above basis

The next problem was to decide upon a proper basis for estimating total repayments and withdrawals to arrive at net provident fund contributions of these employees In the absence of any other relevant indicator, the employees of educational institutions are treated on a par with employees of State Governments and the ratio of repayments to total contributions of the employees of State Governments is used to derive estimates of repayments to employees in educational institutions The estimates of repayments thus arrived at are deducted from the total gross contributions in order to obtain net saving in the form of provident funds of employees in educational institutions

It may be mentioned that the saving estimates given here also include contributions of the temporary staff in educational institutions who are not eligible for provident fund benefits Again, the net contributions of the staff in educational institutions managed by Central and State Governments are already covered in the provident fund estimates of Government

[1] *Education in India* and *Education in Universities in India*, Ministry of Education, Government of India

employees and to this extent there is a double counting, although the amounts involved are not likely to be substantial. On the other hand as already pointed out, the contributions of administrative staff employed in schools and research institutions are not covered in the estimates of net provident fund contributions and, therefore, to this extent, the figures tend to be understated.

Employees of Financial Institutions. Saving in provident funds of employees of various financial institutions are separately estimated with the exception of loan and investment companies for want of data. However, the magnitudes involved in terms of provident funds of employees of loan and investment companies may not be high considering their relative position among financial institutions.

The provident fund contributions of the employees of the Reserve Bank of India are obtained directly from the Bank's study of saving. The estimates for employees of other banking companies are derived on the basis of the wages and salaries paid to them as reported in their income and expenditure statements published by the Reserve Bank.[1] It is assumed that a constant proportion, namely, 12½ per cent of the total wages and salaries represents the total contributions to provident funds made by employees and employers in all types of banking institutions.

The annual reports[2] of the Life Insurance Corporation of India provide data on the Corporation's contributions to staff provident funds. The relevant data are available for the periods 1 January to 31st August 1956, 1 September 1956 to 31 December 1957 and for the year 1958. These data are adjusted for the differences in the accounting period to obtain the contributions made by the Corporation to provident funds during the years 1956 and 1957. It is assumed that the employee's share in the contributions to provident funds is equal to the employer's share and the above estimates of the Corporation's contributions are doubled to represent the total provident fund contributions credited to all the employees of the Life Insurance Corporation of India during the years 1956 and 1957. The estimates of provident fund contributions of employees of all non-life insurance companies for the years 1956 and 1957 and for those employed in both life and non life insurance companies for the years 1948 to 1955 are derived on the basis of the data available in the annual reports published by the Controller of Insurance.[3] These reports provide data on

[1] *Statistical Tables Relating to Banks in India.*
[2] *Annual Report and Accounts of the Life Insurance Corporation of India.*
[3] *Indian Insurance Year Book.*

only the total expenses of management. Hence, the average ratio of wages and salaries to total expenses of management of the Life Insurance Corporation of India for the years 1956, 1957 and 1958, as given in its annual reports, is applied to the total expenses of management to estimate the total wages and salaries paid to the employees of all insurance companies. The total contributions to provident funds of these employees are derived from the estimates of wages and salaries by assuming the same proportion of contribution to provident funds as in the case of the Life Insurance Corporation of India.

The annual estimates of provident fund contributions of employees of all banking institutions and insurance companies are added together and then adjusted to financial years. The estimates are finally netted out by deducting repayments and withdrawals which are estimated by using the ratio of withdrawals to gross provident fund contributions of State Government employees.

Aggregate Estimates. The aggregate estimates of Individuals' saving in provident funds are obtained as the sum of the net contributions of the various categories of employees. The saving estimates of the National Council are presented in Tables 5.5.1 and 5.5.2 while a comparison of these estimates with the Reserve Bank estimates is provided in Table 5.5.3. The Bank estimates are uniformly higher than the National Council estimates throughout the period. This might partly be due to the higher estimates of provident funds originating in the company sector which the Bank estimated on the basis of a sample study. The series, however, in both cases clearly indicate an upward trend.

Pension Funds

The third item of contractual saving is comprised of family pension funds and other pension funds. The former covers the General Family Pension Fund, the Bombay Family Pension Fund, the Bengal Christian Family Pension Fund, the Hyderabad Family Pension Fund and other family pension funds while the latter relates to the Hindu Family Annuity Fund, the Postal Insurance and Life Annuity Fund, the Staff Benefit Fund, the Technical Trainees Benefit Pension Fund, the Clergy Endowment Fund etc. The operating statements of the different categories of pension funds which disclose opening and closing balances, the total receipts and repayments made during the year and data on interest payments are published by the Comptroller and Auditor General of India.[1]

[1] *Combined Finance and Revenue Accounts of the Central and State Governments in India*

TABLE 3.5.1

INDIVIDUALS' SAVING IN THE FORM OF PROVIDENT FUNDS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I. *Government employees*	N A	N A	113	146	124	202	213	226	267	300
II *Employees under E P F scheme*	*N A*	*N A*	*128*	*134*	*139*	*189*	*148*	*173*	*185*	*261*
1 Unexempt	N A	N A	16	18	20	72	54	69	86	158
2 Exempt	N A	N A	112	116	119	117	94	104	99	103
III *Employees under C M P F scheme*	N A	N A	6	6	6	6	6	13	26	32
IV *Employees of financial institutions*	N A	N A	13	15	14	18	18	22	31	34
V *Employees of educational institutions*	N A	N A	27	34	32	42	34	52	66	66
VI *Individuals' saving in provident funds (I+II+III+IV+V)*	260[a]	270[a]	287	335	315	457	419	486	575	693

[a] Rough estimate
N A = Not available
Source Table 3.5.2

TABLE 352

NET PROVIDENT FUND CONTRIBUTIONS OF DIFFERENT CLASSES OF EMPLOYEES, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Government employees										
1 Central										
(i) Receipts	N A	N A	204	233	233	308	356	371	410	N A
(ii) Withdrawals	N A	N A	119	130	148	158	200	209	229	N A
(iii) Net contributions	N A	N A	85	103	85	150	156	162	181	194
2 State										
(i) Receipts	N A	N A	67	92	99	108	146	129	160	N A
(ii) Withdrawals	N A	N A	39	49	60	56	89	65	74	N A
(iii) Net contributions	N A	N A	28	43	39	52	57	64	86	106
II Employees under E P F scheme										
1. Unexempt Category										
(i) Receipts	N A	N A	18	21	23	84	69	78	98	178
(ii) Withdrawals	N A	N.A	2	3	3	12	15	9	12	20
(iii) Net contributions	N A	N A	16	18	20	72	54	69	86	158
2 Exempt category										
(i) Receipts	N A	N A	115	120	124	128	110	123	130	119
(ii) Withdrawals	N A	N A	3	4	5	11	16	19	31	16
(iii) Net contributions	N A	N A	112	116	119	117	94	104	99	103

III Employees under C.M P F scheme										
1 Receipts	N A	N A	6	6	6	6	7	14	27	34
2 Withdrawals	N A	N A	N	N	N	N	1	1	1	2
3 Net contributions	N A	N A	6	6	6	6	6	13	26	32
IV Employees of financial institutions										
1 Receipts	N A	N A	28	31	33	34	39	42	45	49
2 Withdrawals	N A	N A	15	16	19	16	21	20	14	15
3 Net contributions	N A	N A	13	15	14	18	18	22	31	34
V Employees of educational institutions										
1 Receipts	N A	N A	64	74	82	87	87	106	101	101
2 Withdrawals	N A	N A	37	40	50	45	53	54	35	35
3 Net contributions	N A	N A	27	34	32	42	34	52	66	66

N A = Not available
N = Nil or negligible

Sources Item I *Combined Finance and Revenue Accounts of the Central and State Governments in India*, Office of the Comptroller and Auditor General of India, New Delhi

Item II *Report on the Working of Employees' Provident Scheme*, The Central Board of Trustees, Employees' Provident Fund, Ministry of Labour and Employment, Government of India, New Delhi

Item III *Annual Report on the Working of the Coal Mines Provident Fund*, Ministry of Labour and Employment, Government of India, New Delhi

Item IV *Reserve Bank of India Bulletin*, March 1960, and *Statistical Tables Relating to Banks in India*, Reserve Bank of India, Bombay

Report and Accounts of the Life Insurance Corporation of India, Bombay

Indian Insurance Year Book, Controller of Insurance, Simla

Item V *Education in India* and *Education in Universities in India*, Ministry of Education, Government of India

TABLE 353

ESTIMATES OF INDIVIDUALS' SAVING IN PROVIDENT FUNDS BY THE NCAER AND THE RESERVE BANK, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I NCAER estimate	260	270	285	334	314	457	420	485	575	694
II Reserve Bank estimate	N A	N A	295	384	406	532	602	656	729	782

N A =Not available

These data are used by the National Council to estimate Individuals' saving in pension funds for the years 1948-49 to 1955-56, while for the last two years the relevant information is obtained through the courtesy of the Office of the Comptroller and Auditor General of India

Individuals' saving in pension funds is measured net of all withdrawals and repayments and the estimates are shown in Table 3 6 1 The estimates appear to account for only a negligible proportion of the saving of Individuals The net saving in pension funds was, in fact, negative by small amounts during the first three years in the series but later on increased steadily from Rs 5 million in 1951-52 to Rs 31 million by 1957-58 The increase perhaps reflects the institution of suitable schemes for promoting saving in the form of pension funds

Small Savings

The different types of small savings include the National Saving Certificates, the Treasury Savings Deposit Certificates, the 12-Year National Plan Saving Certificates, the 15-Year Annuity Certificates, the Post-Office Savings Bank Deposits and the Post-Office Cash Certificates Individuals' saving in the form of Post-Office Savings Bank Deposits should be treated on a par with other bank deposits since they are as liquid as other deposits However, in this study, they are included under small savings for the reason that they are so treated by the Government A similar treatment will help easy comparison of the National Council estimates with those of others

The *Reports on Currency and Finance* provide data on annual receipts and repayments under different items of small savings which are used by the National Council to arrive at net saving The total receipts less repayments, aggregated over all categories, are assumed to represent wholly Individuals' small savings It is likely that the Local Authorities might have purchased some types of saving certificates issued by the Government but the amounts involved are not likely to be of any significant magnitude The estimates derived by the National Council are presented in Table 3 7 1 which suggest that the net receipts increased by more than 100 per cent during the period under study

Government Securities

The cash subscriptions of Individuals to the market loans floated by the Central, State and Local Governments constitute their saving in the form

of Government securities The net changes in the marketable rupee loans and treasury bills issued by the Central Government, the permanent debt and the floating debt of the State Governments and the market loans of the Local Authorities provide a measure of the total borrowings from the public through the issue of Government securities Individuals' saving in Government securities can be estimated as a residual by deducting from the net variations in these securities the changes in the holding of the Government and the Corporate sectors

Fairly reliable information is available on the total securities issued and securities held by the corporate bodies, while the data on security holdings of the Government sector are not available in as much detail as to permit the derivation of Individuals' holdings on a residual basis In the absence of any better alternative the National Council decided to use the estimates made by the Reserve Bank of India in its study of saving

The Reserve Bank gives estimates of the variations in the household sector's net claims against the Government sector for the years 1950-51 to 1957-58 The estimates of the variations in the Central and State Government securities actually relate to the *initial* subscriptions of the household sector It should be noted that the Bank does not take into account the purchases or sales of Government securities by the households other than their initial subscriptions The estimates are made on the basis of surveys conducted by the Bank regarding the initial subscriptions of various sectors to the market loans of the Central and State Governments during the years 1955-56 to 1958-59

The changes in Individuals' holdings of securities of the Local Authorities are, however, estimated by the Reserve Bank on the basis of its periodical surveys relating to their borrowings and investments The investments of banking and insurance companies in the securities of Local Authorities and as well the inter-Local Authority investments are deducted from their total borrowings to arrive at the net purchases by the Individuals

The estimates of Individuals' saving in Government securities are presented in Table 3 8 1 The series suggests that there has been a tremendous increase in Individuals' saving in the form of Government securities during the last year of the First Plan and the first year of the Second Plan The dissaving (practically negligible) in 1957-58 is rather striking

TABLE 361

INDIVIDUALS' SAVING IN THE FORM OF PENSION FUNDS[a], 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Receipts	12	13	14	27	47	38	35	51	61	N A
II Repayments	13	14	15	22	37	28	20	21	31	N A.
III Individuals' saving in pension funds (I—II)	—1	—1	—1	5	10	10	15	30	30	31[b]

[a] Includes family pension funds which are of negligible magnitude
[b] Rough estimate
Source *Combined Finance and Revenue Accounts of the Central and State Governments in India*, Office of the Comptroller and Auditor General of India, New Delhi

TABLE 371

INDIVIDUALS' SAVING IN THE FORM OF SMALL SAVINGS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Post office savings bank deposits										
1 Gross receipts	857	890	1011	1076	1134	1174	1349	1581	1770	1799
2 Repayments	668	742	848	949	956	1031	1104	1212	1482	1625
3 Net receipts (1—2)	189	148	163	127	178	143	245	369	288	174
II Post office cash certificates and national saving certificates [a]										
1 Gross receipts	227	238	237	246	259	284	363	382	435	61
2 Repayments	116	124	117	119	109	112	113	112	166	315
3 Net receipts (1—2)	111	114	120	127	150	172	250	270	269	—254
III Ten-year treasury savings deposit certificates										
1 Gross receipts	N A	N A	53	131	76	69	56	18	39	64
2 Repayments	N A	N A	N	N	3	5	5	7	9	16
3 Net receipts (1—2)	N A	N A.	53	131	73	64	51	11	30	48
IV Twelve-year national plan savings certificates										
1 Gross receipts	N A	N A	N A	N A	N A	N A	N A	N A	N A	715
2 Repayments	N A	N A	N A	N A	N A	N A	N A	N A	N A	N
3 Net receipts (1—2)	N A	N A	N A.	N A	N A	N A	N A	N A	N A	715

V Fifteen-year annuity certificates										
1 Gross receipts	N A	N A.	N A	N A.	N A	N A	6	4	4	6
2 Repayments	N A	N A	N A	N A	N A	N A	N	N	1	1
3 Net receipts (1—2)	N A	N A	N A	N A	N A	N A	6	4	3	5
VI. Individuals' small savings Total net receipts (I+II+III+IV+V)	300	262	336	385	401	379	552	684	590	688

* The issue of these certificates was stopped since 1956-57 and the negative sign in the last year of the series suggests cashing of the old certificates by the creditors

N A =Not applicable

N=Nil or negligible

Source *Report on Currency and Finance*, Reserve Bank of India, Bombay

TABLE 381

INDIVIDUALS' SAVING IN THE FORM OF GOVERNMENT SECURITIES, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Variations in Individuals' holdings of Central and State Government securities	N A	N A	19	24	36	92	24	193	263	20
II Variations in Individuals' holdings of securities of local authorities	N A	N A	—19	—19	—12	—12	—18	—36	—4	—24
III Individuals' saving in Government securities (I+II)	N A	N A	N	5	24	80	6	157	259	—4

N=Nil or negligible
N.A.=Not available
Source "Estimates of Saving in the Indian Economy", *Reserve Bank of India Bulletin*, March 1960, Bombay

Corporate Securities

For the purpose of this study, Corporate securities comprise shares and debentures issued by all non-Government companies and share capital of all cooperative societies The estimates of Individuals' saving in different types of securities are derived separately from the data available in various sources The procedures adopted by the National Council are discussed below in detail

Company Securities The Controller of Capital Issues (CCI), Government of India, publishes periodically reports on the consents granted to companies for raising capital in the money market Under the law, all companies which propose to issue capital worth more than Rs. 500,000 are required to secure prior permission from the Controller The Controller maintains a record of the applications received by him for capital issues, the number of such companies and the amounts for which consents are given, the capital raised by the companies and such other details[1] Upto 1956, the data published by the Controller reveal the amounts of capital raised by the companies against the consents obtained by them during different years but the data relating to actual capital raised from year-to-year are not available It is conceivable that some companies might not have raised the capital during the same year in which they secured the consents. This deficiency tends to render the data published by the Controller somewhat undependable to estimate the total capital raised by the companies during a particular year However, for the years 1956 to 1958 annual estimates are available separately for the actual amounts raised by the companies irrespective of the year(s) in which the corresponding consents were obtained

The CCI data also provide a breakdown of the capital raised by companies by the categories of new shares which include ordinary and preference shares issued for cash, the bonus issues and the debenture capital The data, which are subject to the limitations pointed out above, are utilized by the National Council to derive estimates of the changes in the total share and debenture capital of all non-Government companies separately

[1] *Quarterly Statistics on the Working of Capital Issues Control,* Office of the Controller of Capital Issues, Ministry of Finance, Government of India

An important source from which it is possible to derive an independent estimate of the changes in the share capital of all companies is the information published by the Department of Company Law Administration.[1] The National Council consulted all the published information and also obtained additional details from the Office of the Company Law Administration (CLA) and derived a series of total paid-up capital of all kinds of companies as at 31 March of each year for the period 1948-49 through 1957-58 The variations in the paid-up capital series obtained from the data compiled by the CLA represent the net changes in the paid-up capital of the companies In other words, the decreases in paid-up capital due to forced or voluntary liquidations of companies are deducted from the increases arising out of new capital issues in arriving at the total paid-up capital of the companies

The Reserve Bank publishes consolidated financial statements of all banking companies[2] in India from which their aggregate paid-up capital can be obtained The paid-up capital series of all insurance companies can likewise be arrived at from the annual reports of the Controller of Insurance[3] As regards non-financial companies, no such consolidated statements are available from any source The Reserve Bank analysis of finances of non-Government non-financial companies, however, provides a measure of the paid-up capital of all such companies on a sample basis The samples of 750 and 1001 public limited companies taken by the Bank, it is reported, account respectively for about two-thirds and three-quarters of the total paid-up capital of all non-Government non-financial public limited companies The paid-up capital data given in the sample studies are blown-up using the appropriate multipliers to arrive at the paid-up capital of all non-Government non-financial companies The data thus derived from different sources are utilized to derive a complete series of the total share capital of all non-Government companies

The National Council compared the CLA estimates with the paid-up capital series based on the data published by the CCI and the series derived from the publications of the Reserve Bank The CLA paid-up capital series for non-financial companies differs to some extent from the estimates derived from the Reserve Bank sample studies while the two estimates are

[1] *Working of Joint Stock Companies in India, 1951-52, 1952-53 and 1953-54, 1954-55,* and *Monthly Blue Book on Joint Stock Companies in India,* March and September 1959, Department of Company Law Administration, Ministry of Commerce and Industry, Government of India

[2] *Statistical Tables Relating to Banks in India*

[3] *Indian Insurance Year Book*

quite close in case of banking and insurance companies On the other hand, the changes in the total paid-up capital of all non-Government companies as derived from CLA data differ substantially from the corresponding CCI estimates, probably because of the various reasons indicated above It may also be noted here that the CLA is the only source which gives a consolidated picture of the net changes in paid-up capital of all non-Government companies The series is considered the most reliable and comprehensive to represent the total paid-up capital of all companies and therefore is used for this purpose

The paid-up capital series, obtained from the Department of Company Law Administration, represents only share capital which is the most important source of company finance in India The National Council depended on the data furnished by the Controller of Capital Issues which show separately the amounts raised by companies through debentures against the consents given to them during different years These data, however, suffer from the limitations already indicated above

An alternative estimate of the total debenture capital raised by all companies is derived on the basis of data available in other sources The information contained in the Reserve Bank analysis of finances of non-Government non-financial companies shows separately the debenture capital issued by such companies The sample data are blown up to arrive at the debenture capital of all such companies using the total paid-up capital of all companies as a blow-up factor The data on debenture capital issued by the financial companies are directly obtained from the publications of the Reserve Bank and the Controller of Insurance

The two sets of estimates on debenture capital are finally compared and the CCI estimates are preferred to the other estimates since they appear more reliable notwithstanding the limitations

The total securities (shares and debentures) thus derived represent the holdings of the three sectors, Government, Corporations and Individuals In order to arrive at the changes in Individuals' holdings, the changes in securities held by the Government and Corporate sectors are deducted from the year-to-year increases in total securities The most important Governmental agencies which hold Corporate securities are the statutory financial corporations of the Central and State Governments The holdings of these corporations are estimated from the information available in their balance sheets which the National Council analysed The data for the Government registered companies are directly obtained from the balance sheets of all such companies No effort is made to estimate the ownership of securities by the Central and State Government departments

The securities held by Local Authorities are estimated on the basis of the data contained in the Reserve Bank Survey of Borrowings and Investments of Local Authorities[1]

The holdings of the non-Government non-financial companies are derived from a blow-up of the available sample data using the total paid-up capital as a blow-up factor The securities held by banks, insurance companies and provident societies are obtained from the annual reports of the Reserve Bank of India and the Controller of Insurance Securities held by loan, investment and other financial companies are derived on the basis of the ratios of their paid-up capital to that of the non-Government non-financial companies in the absence of relevant data

The security holdings of the Corporate sector as derived from their balances sheets in the above manner relate to their investments in shares and debentures issued by both Indian and non-Indian corporations The investments in foreign Corporate securities by Indian corporations are deducted from their estimated total security holdings to arrive at the Corporate sector holdings of the domestic Corporate securities The data given in the Reserve Bank *Surveys of India's Foreign Liabilities and Assets* are used for this purpose Foreigners in their turn partly finance the Indian corporations by investing in their shares and debentures The total holdings by foreigners of the shares and debentures issued by Indian companies are also estimated from the particulars available in the above surveys of the Reserve Bank

The net increases in Individuals' holdings of company securities are estimated by deducting from the net changes in total securities issued by all non-Government corporations the corresponding variations in securities held by the Government and Corporate sectors as well as foreigners

Conceptually, investment by Individuals in shares and debentures of foreign corporations should also be taken into account while estimating Individuals' saving in Corporate securities However, as no data are available regarding Individuals' investment in foreign company securities, which in any case are not likely to be significant, suitable adjustments could not be made

The National Council estimates of Individuals' saving in the form of company securities are presented in Tables 3 9 1 to 3 9.4 Table 3.9 5 shows a comparison of the National Council estimates with those of the Reserve Bank of India Both the sets of estimates reveal, to some extent.

[1] "Survey of Borrowings and Investments of Local Authorities", *Reserve Bank of India Bulletins*, April 1958, February 1959 and April 1960, Bombay

TABLE 3 9 1

INDIVIDUALS' SAVING IN THE FORM OF COMPANY SECURITIES, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Increase in total company securities*	*N A*	*983*	*601*	*613*	*399*	*483*	*333*	*573*	*338*	*553*
1 Shares	N A	917	486	592	377	395	190	519	310	448
2 Debentures	N A	66	115	26	22	88	143	54	28	105
II *Increase in security holdings of the Government sector*	N A	N	2	N	N	N	N	15	572	119
III *Increase in security holdings of the Corporate sector*	N A	170	279	133	—51	208	118	70	—553	96
IV *Increase in security holdings of foreign branches and non-residents*	N A	73	73	42	70	89	45	44	85	191
V *Individuals' saving in company securities (I—II—III—IV)*	N A	740	247	443	380	186	170	444	234	147

N A =Not available
N =Nil or negligible
Sources Item I (1) Table 3 9 2
Item I (2) *Report on Currency and Finance*, Reserve Bank of India, Bombay.
Item II Table 3 9 3
Item III Table 3 9 4
Item IV *Survey of India's Foreign Liabilities and Assets*, Reserve Bank of India, Bombay

TABLE 392

TOTAL SHARE CAPITAL OF NON-GOVERNMENT JOINT STOCK COMPANIES IN INDIA, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Paid-up capital of all joint stock companies	6283	7239	7754	8558	8976	9412	9697	10241	10776	13002
II Paid-up capital of Government registered companies	155	194	223	435	476	517	612	638	862	2640
III Paid-up capital of non-Government companies (I—II)	6128	7045	7531	8123	8500	8895	9085	9603	9914	10362

Sources Item I *Working of Joint-Stock Companies in India*, 1951-52, 1952-53, and 1953-54, 1954-55 and *Monthly Blue Book on Joint Stock Companies in India*, March 1959 and September 1959, Company Law Administration, Ministry of Commerce and Industry, Government of India, New Delhi

Item II NCAER analysis of finances of Government registered companies

TABLE 3.9.3

COMPANY SECURITY HOLDINGS OF THE GOVERNMENT SECTOR, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Securities held by local authorities	1[a]	1[a]	1	1	1	1	1	1	1	1
II Securities held by government registered companies	1	1	3	3	3	3	3	3	3	4
III Securities held by government statutory corporations	N A	N A	N A	N A	N A	N A	N A	15	587	705
IV Total security holdings of the Government sector	2	2	4	4	4	4	4	19	591	710

[a] Rough estimate

N A = Not applicable

Sources Item I · "Survey of Borrowings and Investments of Local Authorities", *Reserve Bank of India Bulletins*, April 1958, February 1959 and April 1960, Bombay

Item II . NCAER analysis of finances of Government registered companies

Item III *Statistical Tables Relating to Banks in India*, Reserve Bank of India, Bombay. *Report and Accounts of the Life Insurance Corporation of India*, Bombay *Report on Currency and Finance*, Reserve Bank of India, Bombay

TABLE 394

COMPANY SECURITY HOLDINGS OF THE CORPORATE SECTOR, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Securities held by non-Government financial corporations*	*679*	*704*	*904*	*888*	*754*	*876*	*922*	*1008*	*467*	*507*
1 Banks	243	212	290	233	148	149	160	163	151	151
2 Insurance companies	269	321	357	399	454	561	573	606	116	119
3 Loan and investment companies	167	171	257	256	152	166	189	239	200	237
II *Securities held by non-Government non-financial corporations*	*855*	*1006*	*1092*	*1248*	*1337*	*1429*	*1504*	*1493*	*1483*	*1541*
1 Public limited companies	629	736	779	884	930	926	1011	988	999	1053
2 Private limited companies	226	270	313	364	407	503	493	505	484	488
III *Foreign corporate securities held by Indian corporations*	55	61	67	74	80	86	92	96	98[a]	100[a]
IV *Total security holdings of the Corporate sector (I+II—III)*	1479	1649	1929	2062	2011	2219	2334	2405	1852	1948

[a] Rough estimate

Sources Item I *Statistical Tables Relating to Banks in India*, Reserve Bank of India, Bombay
Indian Insurance Year Book, Controller of Insurance, Simla

Item II NCAER analysis of finances of non-Government non-financial corporations

Item III *Survey of India's Foreign Liabilities and Assets*, Reserve Bank of India, Bombay

TABLE 395

ESTIMATES OF INDIVIDUALS' SAVING IN COMPANY SECURITIES BY THE NCAER AND THE RESERVE BANK, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I NCAER estimate	N A	739	217	443	380	190	168	445	234	146
II Reserve Bank estimate	N A	N A	178	—50	35	176	135	5	623	300

N A =Not available

erratic fluctuations in Individuals saving in company securities during the period under consideration, but they seem to be more prominent in the estimates made by the Reserve Bank Again the annual estimates made by the Reserve Bank and the National Council are wide apart except for the years 1953-54 and 1954-55 when the two sets of estimates seem to compare favourably The Reserve Bank estimates, on the whole, are somewhat lower than the National Council estimates save for the last two years in the series The maximum differences between the two sets of estimates occur during the years 1951-52 and 1955-56 which form the first and last years of the First Five Year Plan and while it is not possible to explain these differences, it may be pointed out that the negative sign in the Bank estimate for 1951-52 seems questionable and the very low Bank estimate for 1955 56 is associated with a very high estimate for 1956-57

Cooperative Shares The data on the share capital of different types of cooperative institutions operating in the country are available in the annual reports on Cooperative Movement in India published by the Reserve Bank The reports give a detailed break-up of the ownership of shares floated by different types of cooperatives but such details are however, available only since 1957-58 Individuals' subscriptions to the share capital of the cooperatives are estimated for different years by the National Council on the basis of the proportion of Individuals' share in the total paid-up capital of cooperatives during the year 1957-58 The year-to-year changes in Individuals' holdings of cooperative shares are taken to represent their savings in this form The estimates of saving are adjusted to financial years as the basic figures relate to years ending 30 June Table 3 9 6 presents the estimates for the period 1949-50 to 1957-58 which show a rising tendency by registering an increase of about 100 per cent between the years 1953-54 and 1957-58

TABLE 396

INDIVIDUALS' SAVING IN THE FORM OF COOPERATIVE SHARES, 1948-49 TO 1957-58[a]

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Total paid-up capital of all cooperatives*	*423*	*376*	*434*	*491*	*428*	*591*	*647*	*771*	*925*	*1220*
1 Cooperative credit societies	320	230	261	295	218	368	415	495	578	786
2 Central and primary land mortgage banks	6	7	8	10	11	13	14	16	21	34
3 Cooperative non-credit societies	97	139	165	186	199	210	218	260	326	400
II *Shares of cooperatives held by Government*	*157*	*122*	*140*	*159*	*127*	*197*	*219*	*261*	*307*	*420*
1 Cooperative credit societies	106	76	87	98	72	122	138	165	192	262
2 Central and primary land mortgage banks	5	6	6	8	9	11	11	13	16	27
3 Cooperative non-credit societies	46	40	47	53	46	64	70	83	99	131
III *Cooperative security holdings of Individuals* (I—II)	266	254	294	332	301	394	428	510	618	800
IV *Individuals' saving in cooperative shares* (△III)	N	—12	40	38	—31	93	34	82	108	182

[a]Relates to agricultural years
N=Nil or negligible
Source *Statistical Statements Relating to the Cooperative Movement in India*, Reserve Bank of India, Bombay

Individuals' Non-Financial Assets

The estimates of direct investment in non-financial assets by Individuals assume considerable importance as nearly two-thirds of their savings are channelled directly into tangible assets The National Council endeavoured to identify all types of non-financial assets in which Individuals invest but the available statistical information did not permit complete coverage of all the items As a result, useful estimates of investment in physical assets could be derived only for farm investment, building construction, non-corporate business assets and some items of transport equipment Investment of Individuals in farm inventories and non-corporate inventory investment, except for registered enterprises, remain completely left out owing to lack of usable data No attempts are made to estimate separately Individuals' investment in consumer durables except for items such as motor cars included under transport equipment

The National Council consulted the various reports issued by the National Sample Survey to arrive at Individuals' investment in some physical components as per details discussed under the items concerned The National Council also made full use of the valuable data contained in the Rural Credit Surveys conducted by the Reserve Bank, particularly to derive the estimates of Individuals' investment in agriculture which is the most important item The data contained in the reports of Census of Manufactures are used to estimate investment in physical assets of non-corporate enterprises The production statistics published by the Directorate of Industrial Statistics and the data on imports of cars etc, published by the Directorate-General of Commercial Intelligence and Statistics, are made use of in estimating Individuals' investment in transport equipment The detailed procedures adopted in processing the data available in various sources, the methods of estimation of gross investment, the derivation of depreciation allowed on assets and finally estimates of net investment are discussed, in detail, in the following sections

Estimates of Depreciation

An important problem in estimating Individuals' net investment in physical assets is the appropriate adjustment for depreciation on these assets Practically, no information is available either on the magnitude or the rates of depreciation relevant to different types of capital assets, except for certain rough indicators on the life of a few assets The National Council examined thoroughly all the available information in

this regard and attempted to arrive at a reasonable estimate of the period of life of these assets vis-a-vis the rates of depreciation to be allowed

The straight-line method of depreciation is used to derive depreciation incurred on different items of physical assets held by Individuals This method assumes that the capital value of an asset is consumed in equal instalments over the entire life of the asset, and the actual amount allowed every year for capital consumption is represented by the original value of the asset divided by its period of life It should be noted that the year-to-year variations in the intensity of use and rate of obsolescence or the changes in the prices of the asset over its period of life are not taken into account

The total amount of depreciation incurred in any particular year can be split up into two distinct components, viz, depreciation incurred on the new assets acquired during the year and that allowed on the total value of assets accumulated up to the period Practically no usable data are available to estimate the cumulative depreciation The National Council, therefore, attempted to estimate the gross investment for the past years as far back as the assumed life periods of the assets extended A detailed investigation was made to obtain a reliable picture of trends in different types of assets in the past years on the basis of the available information For this purpose, the current trend in gross investment was extrapolated after roughly adjusting it for assumed variations in the structure and the level of the economy caused by such factors as war, agrarian reforms etc

The nature of the trend in gross investment over the period 1948-49 to 1956-57 is first observed by plotting the available data A straight line fit by the method of least squares is found to explain the trend for most of the items over the nine years The trend factor is then suitably adjusted to allow for possible variations in the rate of investment before 1948-49 For example, in the case of investment in land improvement, the original trend coefficient obtained from the least square fit is halved while for investment in farm construction 75 per cent of the trend coefficient is considered reasonable In the case of non-corporate fixed assets, the annual investment figures obtained by using the original trend for the period 1939-40 to 1947-48 are reduced by 50 per cent to allow for the assumed fall in such new investment over this period

A different procedure is adopted to estimate investment in urban residential and non-residential construction prior to 1948-49 The rate of increase in urban residential construction amounted to 10 per cent per annum during the years 1948-49 to 1955-56 and about 25 per cent during 1955-56 and 1956 57 As construction activity in the past was much less

an annual rate of 5 per cent was taken to represent the increase in investment in the earlier period In a similar manner, for investment in non-residential construction an annual increase of 6 per cent is assumed

The methods adopted for estimating investment in earlier years, as explained above, take no explicit account of the price variations It may be argued that the rupee value of the physical assets in the past was much different from the prices prevailing during the period under study To this extent, the estimates of gross investment derived by extrapolating the current series do not reflect their original prices but rather their values in terms of the prices of the period 1948-49 to 1956-57 when a relatively small average annual rate of increase in prices prevailed in contrast to the major increase from the pre war period

The amounts of depreciation incurred on new assets acquired during the period 1948-49 through 1956-57 as also the allowances made on the total value of accumulated assets are then estimated by applying the straight-line method As the estimated values of the assets accumulated up to 1948-49 do not reflect their original prices but rather their values in terms of current prices projected backwards for earlier years, the estimates of depreciation derived as above are intermediate between an original cost and a replacement cost basis It may be noted that the variations in prices have been sharper in the pre war years as compared to the post-war years If it is assumed that, as a result of quality improvements, the usual price deflator for capital goods moderately overstates the correction necessary in reported current rupee values of investment, the depreciation estimates presented here may be close to a replacement cost basis

Several reasons may be given for not taking the ultimate step of estimating depreciation on Individuals' non-financial assets on a strictly replacement cost basis, which takes into account explicitly the variations in prices Such an adjustment when attempted did not seem to give as reasonable results as those presented here, because of the poor quality of price and other related data It may be pointed out that the estimates of depreciation derived are subject to a substantial margin of error resulting from the extrapolation of current trends in gross investment into the past These errors are probably much more significant than the adjustments to be made in regard to the year-to-year variations in the prices of the physical assets in the period covered

The methods adopted to estimate the gross investment, depreciation and net investment in different items of Individuals' physical assets are described below

Farm Investment

All types of farm expenditures are grouped under five categories, viz., land improvement, irrigation, purchase of agricultural implements, machinery etc., construction of farm houses and other capital expenditures. The reports of the National Sample Survey[1] (NSS) and the All India Rural Credit Survey[2] (RCS) provide usable data on different items of farm expenditures. The follow-up of the Rural Credit Survey[3] also gives information on these items for the year 1956-57 but as it was a purposive survey confined to only 11 districts, the data obtained are not helpful in deriving all-India estimates. The NSS collected information in its second and third rounds on various items of farm investment such as construction of wells, tanks, houses etc. The classification of items, however, is too general in the NSS which has grouped construction of wells and tanks with houses and has given the per household expenditure on the construction or improvement of houses, wells, tanks, bunds etc. The RCS, on the other hand, gives separate estimates of per family expenditure on different items of farm assets and hence is preferred to the NSS. Further, the NSS estimates for the second and third rounds show wide fluctuations though both of them relate to almost the same year.

The RCS data, however, have their own limitations. The presence of a large non-monetized sector in the rural areas is not accounted for in the RCS estimates. The RCS figures thus relate only to the cash expenditures of rural households and do not include the acquisition of assets through non-cash expenditure or use of direct family labour. Real investment through group labour as in Community Development Projects and investment in agricultural inventories are not covered by the RCS.

Again it is not possible to clearly distinguish between current and capital expenditures in all farm transactions. For example, expenditure on periodical deep ploughing under land reclamation or annual expenditure on bunds for demarcating fields or expenditure on minor repairs on tanks, wells etc., are of a current nature and hence allowance has to be made for these while arriving at the final estimates. Certain arbi-

1 *The National Sample Survey, Report No. 2*, April-June 1951, The Department of Economic Affairs, Ministry of Finance, Government of India, December 1953.

The National Sample Survey, Report No. 3, August-November 1951, The Department of Economic Affairs, Ministry of Finance, Government of India, January, 1954.

2 *All India Rural Credit Survey Report*, 1951-52, Vols I—III, Reserve Bank of India, Bombay.

3 *The Follow up Rural Credit Survey Report*, 1956-57, Reserve Bank of India, Bombay.

trary deductions are, therefore, made in the estimates based on the RCS data for maintenance and repairs of a current nature

The RCS estimates of per family expenditure on different items of farm investment, adjusted for expenditure on minor repairs and maintenance, are blown up to obtain the gross estimates of investment in 1951-52 The estimates for other years are derived by means of suitable indicators such as total area sown, area under irrigation etc, data on which are available in the reports of the Ministry of Food and Agriculture[1] The extrapolators used for different categories of farm investment and the rates of depreciation allowed in arriving at the estimates of net investment are discussed below

Land Improvement This item covers expenditure on land reclamation, laying of new orchards and plantations, bunding and other land improvements The RCS gives per family expenditure for the year 1951-52 for each particular item of land improvement such as reclamation of land (Rs 4 4), bunding and other improvement (Rs 7 7) and laying of new orchards, plantations etc, (Rs 4 8) The per family expenditure is multiplied by the total number of rural families—55 millions as estimated in the RCS—to arrive at the gross estimates of expenditure on land improvement in 1951-52 The gross investment in land improvement in 1951-52 is obtained by deducting from the gross expenditure on maintenance and repairs amounting to 20 per cent in the case of land reclamation and 30 per cent in the case of bunding as suggested by the RCS Gross investment in land improvement for other years is estimated by applying to the net area sown in these years, the ratio of gross investment to net area sown in 1951-52 The net investment in land improvement is calculated by allowing for depreciation at the rate of 1 5 per cent per annum

Irrigation Gross expenditure on the construction of wells, tanks etc, and the development of other irrigation works is estimated in the RCS at Rs 10 3 and Rs 3 2 per family respectively On the basis of the RCS data, an allowance of 20 per cent is made in the case of wells and tanks for current repairs and maintenance and the resultant is blown up for all-India to obtain the gross investment in irrigation for 1951-52 The ratio of gross investment to area irrigated by these sources in 1951-52 is applied to net area irrigated in other years to obtain gross investment in

[1] *Indian Agricultural Statistics*, Ministry of Food and Agriculture, Government of India

irrigation in other years Net investment in irrigation is estimated by deducting depreciation at an assumed rate of 2 per cent per annum

Agricultural Implements, Machinery etc The RCS estimates the expenditure on agricultural implements, machinery, etc at Rs 10 5 per family Since the data in the RCS relate only to the purchase of agricultural implements etc, no adjustment is made for current repairs and maintenance The RCS figure is inflated to arrive at the all-India estimate of gross investment in agricultural implements etc, for the year 1951-52 The ratio of gross investment to gross area sown in 1951-52 is used to derive gross estimates for other years Depreciation is assumed at 10 per cent per annum while calculating the net investment

Construction of Farm Houses Gross expenditure on construction of farm houses (excluding residential buildings) is calculated on the basis of the data on farm buildings, cattle sheds etc, given in the RCS (Rs 4 7 per family during 1951-52). A deduction of 20 per cent as given in the RCS is allowed for current repairs and maintenance The per family expenditure on construction of farm houses is assumed to remain constant throughout the period, and the corresponding aggregate estimates are derived by multiplying the per family expenditure by the estimated total number of rural households Depreciation is calculated at 4 per cent per annum to arrive at the net investment in farm houses

Miscellaneous Farm Investment This subhead covers all miscellaneous items of capital expenditure not included in the above categories and accounts for Rs 9 2 per family during 1951-52 according to the RCS data The per family expenditure after deduction of 20 per cent for repairs and maintenance is blown up on the basis of the total number of rural families in order to arrive at the aggregate estimates for 1951-52. The estimates for other years are arrived at by assuming that the proportion of investment in miscellaneous farm assets to total farm investment remains constant throughout the period The corresponding estimates of depreciation (or net investment) are arrived at in the same proportion of depreciation (or net investment) to gross investment in the other categories of farm investment

Rural Housing Construction

Individuls' investment in rural housing construction is estimated separately for residential and non-residential categories The estimates of investments in residential construction are derived from the RCS data The RCS estimate of expenditure on construction and maintenance of

residential buildings, given at Rs 45.9 per family in 1951-52 is blown up on the basis of total number of families to obtain the aggregate expenditure on rural construction As recommended by the RCS a downward adjustment of 33 per cent is made on this for current repairs and maintenance and the gross investment in rural residential construction in 1951-52 is derived The gross estimates for other years are obtained on the basis of the estimated number of rural households assuming the per family expenditure to remain constant Net investment in rural residential construction is estimated by providing depreciation at the rate of 2½ per cent per annum

Investment in rural non-residential construction is estimated on the basis of data given in the NSS report on its Seventh Round[1] This report gives investment in buildings by small enterprises separately for rural and urban areas for the year 1953-54 The aggregate investment in buildings of small enterprises in rural areas is taken to represent gross investment in rural non-residential construction in 1953-54 The estimates for other years are derived on the basis of the income originating from small enterprises Depreciation is calculated on a *pro rata* basis with rural housing

Urban Housing Construction

The estimates of Individuals investment in urban housing construction are derived on the basis of the amount of cement and iron and steel utilized in private construction in the absence of any other reliable data The total supply of cement is estimated from the data on cement production, imports, exports and stocks[2] The available supply of cement is split up into various categories such as Railways C P W D, States, Education Agriculture, Central, Defence and Rehabilitation on the basis of the information supplied by the Ministry of Heavy Industries regarding allocation of cement in India A fixed percentage of cement in these categories, except Railways, Defence and C P W D, is assumed to be utilized for private residential and non-residential construction works The average price of cement in each year as fixed by the Cement Controller is applied to estimate the total value of cement utilized in private construction in each year The cost of private construction is estimated by applying to

[1] *National Sample Survey, Report No 19* October 1953—March 1954, The Department of Economic Affairs Ministry of Finance, Government of India

[2] Ministry of Heavy Industries, Government of India, and *Accounts Relating to the Foreign Trade and Navigation of India*, Directorate General of Commercial Intelligence and Statistics Ministry of Commerce and Industry, Calcutta

the value of cement the reciprocal of the ratio of the cost of cement to the total cost in residential and non-residential construction separately calculated on the basis of data available in the Report of the Committee of Experts for Building Works, the Report of the Environmental Hygiene Committee, the Reports of the Public Works Departments in various States and other reports on building costs

An alternative estimate of investment in urban residential and non-residential construction is obtained in a similar manner on the basis of the amount and value of various categories of finished steel such as rods, bars, castings, structurals etc, utilized in private construction activity

The average of the two sets of estimates is taken to represent gross private investment in urban residential and non-residential construction The estimates of net investment are obtained after deducting depreciation assumed at 2 per cent per annum

Non-Corporate Business Assets

The estimates of investment in non corporate business assets are derived from the Census of Manufactures (CM) and NSS data The basic data given in the CM Reports[1] pertain to fixed assets classified into land, buildings, plant and machinery and other assets, and working capital comprising stocks of raw materials, finished and semi-finished products etc, of all registered factories engaged in 29 major categories of industries The particulars are also available regarding the break-up of total fixed capital and working capital according to type of ownership, namely, public and private limited companies, sole proprietors, partnership firms and other concerns Investment in individual items of fixed assets, viz, plant and machinery and other fixed assets and inventories by non corporate business enterprises are estimated from these data by using appropriate ratios

The CM data do not cover all the registered factories due to non-reporting of certain registered factories in time The data are, therefore, adjusted to cover all the registered factories by using appropriate per centages on the basis of details given in the CM reports

The estimates pertaining to the enterprises other than the public and private limited companies are taken as a measure of investment of all unincorporated enterprises excluding those that are unregistered and hence not covered by the Census of Manufactures The items of fixed assets that are considered are investment in plant and machinery and

[1] *Report of the Census of Indian Manufactures* Directorate of Industrial Statistics, Ministry of Commerce and Industry

other fixed assets Investment in land is not taken into account as it does not constitute economic investment. Investment in buildings is already included in the estimates of 'non-residential construction and therefore omitted here The estimates of inventory investment includes raw materials, semi-finished and finished products

Investment in plant and machinery and other assets by unregistered small enterprises is estimated from the NSS data[1] The NSS report gives expenditures on various items of fixed assets by household enterprises not covered under the Indian Factories Act The per household expenditure on plant and machinery and other assets is inflated for all-India to arrive at the estimates of gross investment of small-scale enterprises (unregistered) in 1953-54 The estimates for other years are obtained by applying to the 1953-54 figures the trend in the income originating from small enterprises as obtained from the White Paper on National Income[2] The investment in business inventories of unregistered enterprises could not be estimated for want of data

The estimates of non-corporate business investment are obtained by adding the estimates of registered and unregistered enterprises Net investment in non-corporate business assets is calculated after providing for depreciation at an assumed rate of 5 per cent per annum

It may be mentioned here that the estimates of small enterprises relate only to manufacturing enterprises Household trading and other concerns could not be covered due to lack of usable data

Transport Equipment

The estimates of Individuals' investment in transport equipment are based on the data on domestic production, imports. exports and re-exports of various items of transport equipment such as taxis, lorries, vans etc Other items of transport equipment such as cars, bicycles, motorcycles etc are left out The value of exports and re-exports are deducted from the total value of imports, to which are added import duties on the items The resulting estimates are marked up to cover trade and transport charges assumed to be 20 per cent of the net import value The value of domestic production is added to derive gross investment in various items of transport equipment It is assumed that 80 per cent of the total investment in lorries belong to the Individuals'

[1] *National Sample Survey, Report No 19, op cit*

[2] *Estimates of National Income*, Central Statistical Organisation, Cabinet Secretariat, Government of India

sector thus making allowance for Corporate and Government investment in lorries The net investment in transport equipment is estimated after allowing for depreciation at 7 per cent in the case of taxis and 10 per cent in the case of lorries assumed on the basis of their annual average life

The National Council estimates of Individuals' non-financial assets derived as above are, no doubt, subject to several limitations The method employed to extrapolate gross assets for earlier years on the basis of gross asset formation during the past ten years seems technically more sound than the alternatives available, but has its own deficiencies in yielding reliable data for the past The procedures adopted in projecting recent trends into the past involve substantial elements of subjectivity The absence of any reliable information on the life of the assets again necessitated subjective decisions on the ratios of depreciation to be allowed, based on judgment of experts and what little objective information is available

The attempts made by other research workers in the area to arrive at net investment in physical assets at the beginning of the period (either for 1948-49 or 1951-52) involved even more assumptions than those employed by the National Council Moreover, it is certainly difficult to attribute a reasonable depreciation rate to a global stock of capital whose composition and age distribution is unknown

The estimates of Individuals' saving in different types of non-financial assets during the period 1948-49 through 1957-58 are shown in Tables 3 10 1 to 3 10.6 The estimates suggest that during the period under review the total saving directly invested in physical assets has nearly doubled itself The most important of these items, viz, the urban housing construction registered a steep upward trend, the investment rising from Rs 843 millions in 1948-49 to Rs 3,104 millions in 1956 57 The rural housing construction, on the other hand, has not shown any increase over this period but this may reflect the inadequacies of the available data and procedures of estimation The farm investment contributed on the average about one-quarter of the total investment in physical assets The series relating to investment in non corporate business assets did not show much increase perhaps due to the omission of some kinds of non-corporate investment from the estimates derived The increase registered under transport equipment is as expected in a developing economy

A comparison of the estimates of the National Council with those of the Reserve Bank is shown in Table 3 10 7 The National Council estimates are at a higher level as compared to the Bank estimates for the latter part in the whole series of the total investment in non-financial

TABLE 3 10 1

INDIVIDUALS' SAVING IN THE FORM OF DIRECT INVESTMENT IN PHYSICAL ASSETS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Farm investment*	*786*	*884*	*947*	*922*	*914*	*948*	*945*	*942*	*927*	*N A*
1 Land improvement	328	394	428	427	435	446	445	439	437	N A
2 Irrigation	254	263	275	263	247	258	261	267	258	N A
3 Agricultural implements and machinery etc	58	66	72	64	65	70	66	62	59	N A
4 Construction of farm houses	22	22	23	23	23	24	25	26	27	N A
5 Miscellaneous farm investment	124	139	149	145	144	150	148	148	146	N A
II *Rural housing construction*	*483*	*484*	*478*	*487*	*488*	*488*	*478*	*481*	*485*	*N A*
1 Residential	397	392	387	386	385	386	388	392	397	N A
2 Non-residential	86	92	91	101	103	102	90	89	88	N A
III *Urban housing construction*	*843*	*1077*	*1167*	*1224*	*1324*	*1536*	*1817*	*2515*	*3104*	*N A*
1 Residential	551	733	803	824	900	1046	1251	1788	2009	N A
2 Non-residential	292	344	364	400	424	490	566	727	1095	N A
IV *Non-corporate business assets*	*453*	*413*	*449*	*311*	*381*	*417*	*419*	*467*	*411*	*N A*
1 Fixed assets	364	385	378	374	401	411	353	385	363	N A
2 Inventories	89	28	71	—63	—20	6	66	82	48	N A
V *Transport equipment*	*170*	*132*	*94*	*354*	*250*	*242*	*262*	*416*	*440*	*N A*

VI	*Individuals' saving in direct investment* (I+II+III+IV+V)	2735	2990	3135	3293	3357	3631	3921	4821	5367	6000[a]

[a]Rough estimate

N A =Not available

Source Item I Table 3 10 2

Item II Table 3 10 3

Item III Table 3 10 4

Item IV Table 3 10 5

Item V Table 3 10 6

TABLE 3 10 2

INDIVIDUALS' INVESTMENT IN FARM ASSETS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Land improvement										
1 Gross investment	620	695	741	751	771	793	804	810	820	N A
2 Depreciation	292	301	313	324	336	347	359	371	383	N A
3 Net investment	328	394	428	427	435	446	445	439	437	N A
II Irrigation										
1 Gross investment	586	606	629	627	621	643	656	672	674	N A
2 Depreciation	332	343	354	364	374	385	395	405	416	N A
3 Net investment	254	263	275	263	247	258	261	267	258	N A
III Agricultural implements and machinery etc										
1 Gross investment	526	548	569	575	591	611	622	632	643	N A
2 Depreciation	468	482	497	511	526	541	556	570	584	N A
3 Net investment	58	66	72	64	65	70	66	62	59	N A
IV Farm houses										
1 Gross investment	200	202	204	206	208	211	214	217	220	N A
2 Depreciation	178	180	181	183	185	187	189	191	193	N A
3 Net investment	22	22	23	23	23	24	25	26	27	N A

V Miscellaneous farm investment										
1 Gross investment	361	383	400	403	409	422	428	435	440	N A
2. Depreciation	237	244	251	258	265	272	280	287	294	N.A
3 Net investment	124	139	149	145	144	150	148	148	146	N A
VI Total farm investment										
1 Gross investment	2293	2434	2543	2562	2600	2680	2724	2766	2797	N.A
2 Depreciation	1507	1550	1596	1640	1686	1732	1779	1824	1870	N A
3 Net investment	786	884	947	922	914	948	945	942	927	N A

N A.=Not available

Sources · 1 *All-India Rural Credit Survey—The Survey Report*, Reserve Bank of India, Bombay.
2 *Indian Agricultural Statistics*, Ministry of Food and Agriculture, Government of India

TABLE 3 10 3

INDIVIDUALS' INVESTMENT IN RURAL HOUSING CONSTRUCTION, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Residential construction										
1 Gross investment	1636	1651	1667	1685	1704	1725	1747	1771	1796	N A
2 Depreciation	1239	1259	1280	1299	1319	1339	1359	1379	1399	N A
3 Net investment	397	392	387	386	385	386	388	392	397	N A
II Non-residential construction										
1 Gross investment	318	330	333	348	355	359	352	355	359	N A
2 Depreciation	232	238	242	247	252	257	262	266	271	N A
3 Net investment	86	92	91	101	103	102	90	89	88	N A
III Total rural housing construction										
1 Gross investment	1954	1981	2000	2033	2059	2084	2099	2126	2155	N A
2 Depreciation	1471	1497	1522	1546	1571	1596	1621	1645	1670	N A
3 Net investment	483	484	478	487	488	488	478	481	485	N A

N A =Not available

Sources Item (I)— *All India Rural Credit Survey—The Survey Report*, Reserve Bank of India, Bombay
Item (II)— *National Sample Survey, Report No 19*, October 1953—March 1954, Department of Economic Affairs, Ministry of Finance, Government of India

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INDIVIDUALS' INVESTMENT IN URBAN HOUSING CONSTRUCTION, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Residential construction										
1 Gross investment	893	1095	1188	1232	1332	1506	1744	2325	2596	N A
2 Depreciation	342	362	385	408	432	460	493	537	587	N.A
3 Net investment	551	733	803	824	900	1046	1251	1788	2009	N A
II Non-residential construction										
1 Gross investment	431	497	528	575	610	689	779	959	1354	N A
2 Depreciation	139	153	164	175	186	199	213	232	259	N.A
3 Net investment	292	344	364	400	424	490	566	727	1095	N A.
III Total urban housing construction										
1 Gross investment	1324	1592	1716	1807	1942	2195	2523	3284	3950	N A
2 Depreciation	481	515	549	583	618	659	706	769	846	N A
3 Net investment	843	1077	1167	1224	1324	1536	1817	2515	3104	N A

N A =Not available

Source · Ministry of Heavy Industries, Government of India

TABLE 3 10 5

INDIVIDUALS' INVESTMENT IN NON-CORPORATE BUSINESS ASSETS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Fixed assets*[a]										
1 Gross investment	994	1031	1040	1051	1094	1122	1078	1126	1119	N A
2 Depreciation	630	646	662	677	693	711	725	741	756	N A
3 Net investment	364	385	378	374	401	411	353	385	363	N A
II *Net investment in inventories*[b]	89	28	71	—63	—20	6	66	82	48	N A
III *Total non-corporate business assets*										
1 Gross investment	1083	1059	1111	988	1074	1128	1144	1208	1167	N A
2 Depreciation	630	646	662	677	693	711	725	741	756	N A
3 Net investment	453	413	449	311	381	417	419	467	411	N A

[a]Excludes investment in land and buildings

[b]Relates to registered sole-proprietorships and partnerships only

N A =Not available

Sources (1) *Report of the Census of Indian Manufactures*, Directorate of Industrial Statistics, Ministry of Commerce and Industry, Government of India

(2) *National Sample Survey, Report No 19*, October 1953—March 1954, Department of Economic Affairs, Ministry of Finance, Government of India

TABLE 3 10 6

INDIVIDUALS' INVESTMENT IN TRANSPORT EQUIPMENT, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Gross investment	281	252	226	514	406	407	433	610	653	N A
II Depreciation	111	120	132	160	156	165	171	194	213	N A
III Net investment	170	132	94	354	250	242	262	416	440	N A

N A =Not available

Sources . (1) *Monthly Statistics of the Production of Selected Industries of India*, Cabinet Secretariat, Directorate of Industrial Statistics, Calcutta

(2) *Accounts Relating to the Foreign Trade and Navigation of India*, Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce and Industry

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ESTIMATES OF INDIVIDUALS' NET INVESTMENT IN PHYSICAL ASSETS BY THE NCAER AND THE RESERVE BANK, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Farm investment*										
1 NCAER estimate	786	884	947	922	914	948	945	942	927	N A
2 Reserve Bank estimate	N A	N A	1227	1260	1207	1333	1092	1134	1386	1338
II *Rural housing construction*										
1 NCAER estimate	483	484	478	487	488	488	478	481	485	N A
2 Reserve Bank estimate	N A	N A	826	850	813	897	735	764	933	901
III *Urban housing construction*										
1 NCAER estimate	843	1077	1167	1224	1324	1536	1817	2515	3104	N A
2 Reserve Bank estimate	N A	N A	820	400	2100	1040	1060	1040	2000	1140
IV *Other investment*										
1 NCAER estimate	623	545	543	665	631	659	681	883	851	N A
2. Reserve Bank estimate	N A	N A	556	532	—131	187	511	495	1001	1029
V *Total investment in physical assets*										
1 NCAER estimate	2735	2990	3135	3298	3357	3631	3921	4821	5367	6000[a]
2 Reserve Bank estimate	N A	N A	3429	3042	3989	3457	3399	3433	5320	4408

N.A.=Not available
[a]Rough estimate

assets However, the Reserve Bank estimates of farm investment are consistently higher the estimates of the National Council, which might partly be due to the depreciation provided on the gross assets by the Reserve Bank In the case of housing construction, the Bank has a series at a higher level for rural construction while it has a lower level series for urban construction The differences might be due to the estimation procedures adopted by the Bank and the National Council

INDIVIDUALS' LIABILITIES

Individuals can acquire assets, financial or physical, either by utilizing their accumulated saving or out of their current surplus or by incurring debts An increase in Individuals' assets represents their saving but to the extent that debts are incurred in acquiring assets, the corresponding dissaving offsets saving reflected in the increase in assets Hence, in measuring Individuals' saving through the balance sheet, the changes in total assets are to be netted out against changes in total liabilities The liabilities of Individuals to other sectors only are of significance in this connection as inter-personal obligations will cancel out when considering saving at the aggregate level An attempt is made in this study to estimate Individuals' liabilities to the Government and Corporate sectors Separate estimates are made in the case of the Corporate sector for liabilities to financial and non-financial corporations as well as cooperative banks and societies It should be noted that the estimates of Individuals' liabilities are not complete as all types of liabilities could not be covered because of statistical limitations The estimates may also include liabilities of certain units not strictly pertaining to the Individuals' sector The estimation procedures are discussed in detail in the following sections

Liabilities to the Government Sector

The Budget Papers of the Central and State Governments provide data on the loans granted to Individuals and repayments made by them An estimate of Individuals' liabilities to this sector can be made on the basis of a careful analysis of these documents Such an analysis was attempted by the Reserve Bank of India in its saving study which provides a measure of the total loans given by the Central and State Governments to Individuals as well as repayments of these loans These figures given for the period 1950-51 to 1957-58 are used by the National Council to estimate Individuals' liabilities to the Government sector The estimates

of repayments by the household sector, as given by the Reserve Bank, are deducted from the amounts of loans granted by the Government to derive net liabilities Rough estimates are made for the years 1948-49 and 1949-50 on the basis of the trends during the later period

It should be noted that the data regarding loans and repayments to the State Governments relate only to Part A States for the years 1950-51 to 1955-56 and to all the States for the years 1956-57 and 1957-58 No adjustments are made in the estimates to ensure full coverage of all States Again, the Reserve Bank estimates of repayments of Central Government loans by the household sector, which could not be estimated directly from the Budget Papers, are obtained by applying to the estimates of total repayments against all *other loans and advances* to the Central Government, the ratio of Central Government loans to the household sector to the total of *other loans and advances* by the Central Government

LIABILITIES TO THE CORPORATE SECTOR

Individuals' liabilities to the Corporate sector are estimated separately for different types of financial and non-financial corporations and cooperative institutions The corporate bodies identified for this purpose are the banks, insurance companies, loan and investment companies, non Government non-financial corporations and cooperative banks and societies

Liabilities to Banks

The procedure adopted to estimate Individuals' liabilities to all banking companies is similar to the one used for estimating Individuals' saving in the form of bank deposits The periodical surveys conducted by the Reserve Bank of India, details of which are given in the reports of *Trend and Progress of Banking in India*, provide particulars of loans and advances, classified according to purpose as well as by type, made by the banks in India The commercial bank advances are grouped under the following categories (a) industry, (b) commerce, (c) agriculture, (d) personal and professional and (e) all others The data given in these reports, however, relate to the total amount of loans and advances made by banks to both corporate and non-corporate business enterprises as well as individuals for which no separate details are available In the absence of reliable information it is assumed that loans and advances falling under the categories *personal and professional* and *all others* represent loans granted to Individuals only

The loans and advances made by banks in other categories, viz, agriculture, industry and commerce are split into loans to corporate and non-corporate enterprises on the basis of the information available in the Reserve Bank survey of bank advances to medium and small-scale business units[1] This *ad hoc* survey, confined to a sample of 74 scheduled banks with 556 branches and 151 non-scheduled banks with 244 branches, collected information regarding loans and advances made by the sample banks classified according to purpose Small-scale business is defined to include a proprietory concern, partnership or a public or private limited company with total assets less than Rs 500,000 while business units with assets between Rs 500,000 and Rs 2,000,000 constituted medium-scale enterprises belonging to the Corporate sector The overall figures of secured and unsecured advances granted by the banking companies in the sample to all medium and small scale business units were suitably inflated to cover the entire banking system and the estimates of advances made to corporate and non-corporate small-scale business units by all banks are obtained

The ratios of advances to non-corporate units of small and medium scale business sectors under the categories *industry, commerce* and *agriculture* as at the end of September 1957, given in the Bulletin, to the total bank advances under these categories as at the end of October 1957, are applied to the corresponding estimates of total advances for other years to derive the estimates of advances made to the Individuals' sector under these categories

Estimates of total liabilities of Individuals to banks are obtained by aggregating the bank advances under the categories *personal and professional* and *all others* to the estimates of advances under *agriculture, industry* and *commerce* derived above The estimates are adjusted to financial years as the basic figures relate only to calendar years and the year-to-year changes are taken to represent the net changes in Individuals' liabilities to banks

Liabilities to Insurance Companies

The annual reports of the Controller of Insurance and the Life Insurance Corporation of India[2] provide the basic dam for estimating Indivi-

[1] "Commercial Bank Finance to Medium and Small Scale Business Units", *Reserve Bank of India Bulletin*, June 1959, Bombay

[2] *Indian Insurance Year Book, Report and Accounts of the Life Insurance Corporation of India*

duals' liabilities to all insurance companies and provident societies All types of loans on mortgages on property, loans granted on policies or on other security such as stocks and shares etc, and other miscellaneous loans granted by the insurance companies to the policy holders are treated as constituting Individuals' liabilities to these companies However, all types of insurance *claims* admitted by the companies but not yet paid are deducted while deriving the net liabilities of the Individuals' sector to insurance companies

It should be noted that the balance sheet data by all Indian insurance companies for the years 1950 to 1955, and the data for non-life insurance companies for the later years, relate to their total business in India as well as abroad Hence the estimates of loans given by these companies relate to the loans granted to resident as well as non resident policy holders Since the latter are not included in the Individuals' sector the estimates of loans granted, derived from the balance sheet, are suitably adjusted to represent business at home only on the basis of the ratios of *gross premium written direct in India* to *total premium* In the case of the Life Insurance Corporation of India, however, no such adjustment is warranted as separate estimates are available for business done in India and abroad The estimates of net loans granted by the corporation to only the resident policy holders are taken to represent the net liabilities of Individuals

Liabilities to the non-Indian insurance companies operating in India are estimated on the basis of their total assets by applying the ratio of net loans granted to resident policy holders to total assets (in India) of all Indian insurance companies

The net variations in the amount of loans granted by all Indian and foreign insurance companies to resident policy holders are taken to represent the net changes in the liabilities of the Individuals' sector to the insurance companies The estimates are adjusted to financial years

Liabilities to Loan and Investment Companies

Practically no data are available in regard to the liabilities of Individuals to these institutions The loan and investment companies, it should be noted, operate more or less in the same manner as banking companies providing credit or loans to Individuals and corporate bodies either on personal security or on security of property etc In the absence of any relevant indicator the liabilities of Individuals to these companies are estimated by applying the paid up capital ratio of loan and investment

companies to banking companies to the estimates of total advances made by all banks to the Individuals' sector The year-to-year changes in these estimates are taken to represent the net changes in Individuals' liabilities to loan and investment companies.

Liabilities to Non-Government Non-Financial Corporations

The estimates of Individuals' liabilities to all non-Government non-financial corporations are derived from the combined balance sheet prepared by the National Council for large and small, public and private limited companies The balance sheet data give details of *total receivables* and *total payables* of all these corporations The surplus of total receivables over total payables of the non-Government non-financial corporations is taken to represent the *net receivables* or net liabilities of all other sectors to these corporations These data on receivables (or payables) given in the balance sheet relate to the aggregate receivables (or payables) from all individuals, corporate as well as non-corporate bodies It is assumed that 50 per cent of the total receivables or payables would represent the transactions with the Individuals' sector It may be pointed out that these estimates of Individuals' liabilities are likely to be subject to a large margin of error because of the arbitrary assumptions involved, but it is believed that the magnitudes involved are not likely to be significant when compared to the estimates of Individuals' liabilities to other sectors

Liabilities to Cooperatives

Cooperative banks and societies form an important source of finance to farmers and industrial establishments in rural areas The annual reports of the Reserve Bank of India[1] give details of all financial transactions of the different types of cooperative institutions operating in the country The estimates of total loans granted by all cooperative banks and societies, adjusted for inter-cooperative loans, are taken to represent the net liabilities of the Individuals' sector to cooperatives As the basic data given in the Reserve Bank reports relate to agricultural years, the estimates of liabilities are adjusted to financial years.

The estimates of the net changes in Individuals' liabilities to the Government and the Corporate sectors are given in Tables 3 11 1 to 3 11 5 The estimates reveal very erratic movements

[1] *Statistical Statements Relating to the Cooperative Movement in India*

TABLE 3 11 1

ESTIMATES OF INDIVIDUALS' LIABILITIES TO OTHER SECTORS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Increase in liabilities to the Government sector*	144	145	144	134	145	110	191	292	242	184
II *Increase in liabilities to the Corporate sector*	*N A*	*100*	*332*	*525*	*—245*	*427*	*748*	*1165*	*873*	*162*
1 Banks	N A	127	125	153	—190	93	292	336	269[a]	—34[a]
2 Insurance companies	N A	35	39	63	65	47	37	7	—5	—38
3 Loan and investment companies	N A	103	111	168	—194	103	346	494	354	—54
4 Non-government non-financial corporations	N A	—18	—4	19	—20	65	—47	158	—51	—142
5 Cooperatives	N A	—147	61	122	94	119	120	170	306	430
III *Increase in total Individuals' liabilities* (I+II)	N A	245	476	659	—100	537	939	1457	1115	346

[a]Rough estimate
N A =Not available

Sources Item I — Table 3 11 2
Item II(1) — *Trend and Progress of Banking in India*, Reserve Bank of India, Bombay
Reserve Bank of India Bulletin, June 1959, Bombay
Item II (2) — Table 3 11 3
Item II (3) — Estimated by NCAER on the basis of paid-up capital ratio of loan and investment companies to banking companies
Item II (4) — Table 3 11 4
Item II (5) — Table 3 11 5

TABLE 3112

INDIVIDUALS' LIABILITIES TO GOVERNMENT SECTOR, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Central and State Government loans to household sector	210[a]	215[a]	219	217	237	212	303	441	386	384
II Repayment of loans by the household sector	66[a]	70[a]	75	83	92	102	112	149	144	200
III Net increase in Individuals' liabilities to the Government sector (I—II)	144	145	144	134	145	110	191	292	242	184

[a] Rough estimate

Source "Estimates of Saving in the Indian Economy", *Reserve Bank of India Bulletin*, March, 1960, Bombay

TABLE 3 11 3

INDIVIDUALS' LIABILITIES TO INSURANCE COMPANIES, 1948 TO 1957

(In million rupees)

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
I *Total loans granted by all insurance companies to policy holders*	*150*	*190*	*220*	*288*	*352*	*402*	*454*	*468*	*529*	*541*
1 Loans on mortgages	45	62	79	109	133	146	157	155	154	143
2 Loans on policies	84	109	125	158	198	235	275	287	358	388
3 Loans on stocks, securities etc	5	8	6	3	2	2	2	2	1	1
4 Other loans	16	11	10	18	19	19	20	24	16	9
II *Claims admitted but not paid*	59	63	62	66	66	70	73	80	138	184
III *Individuals' net liabilities to insurance companies* (I—II)	91	127	158	222	286	332	381	388	391	357
IV *Net increase in Individuals' liabilities to insurance companies* (△III)	N A	36	31	64	64	46	49	7	3	—34

N A =Not available

Sources (1) *Indian Insurance Year Book*, Controller of Insurance, Simla

(2) *Report and Accounts of the Life Insurance Corporation of India*, Bombay

TABLE 3.11.4

INDIVIDUALS' LIABILITIES TO NON-GOVERNMENT NON-FINANCIAL CORPORATIONS, 1948-49 TO 1957-58

(In million rupees)

		1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I	Total receivables	2657	3082	3342	3966	3998	4392	4722	5697	6692	6986
II	Total payables	2827	3287	3554	4140	4213	4477	4901	5560	6657	7234
III	Net receivables (I—II)	—170	—205	—212	—174	— 215	—85	—179	137	35	—248
IV	Increase in net receivables (ΔIII)	N A	—35	—7	38	—41	130	—94	316	—102	—283
V	Net increase in Individuals' liabilities to non-Government non-financial corporations (50% of Item IV)	N A	—18	—4	19	—20	65	—47	158	—51	—142

N A = Not available

Source NCAER analysis of finances of non-Government non-financial corporations

TABLE 3 II.5

INDIVIDUALS' LIABILITIES TO COOPERATIVES, 1948-49 TO 1957-58[a]

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Loans granted by credit societies*	*558*	*598*	*690*	*790*	*857*	*953*	*1044*	*1218*	*1530*	*1884*
1 Agricultural credit societies	236	250	291	337	377	416	485	598	768	1071
2 Non-agricultural credit societies	322	348	405	444	472	529	550	609	750	793
3 Grain banks	N A	N A	N A	9	8	8	9	11	12	20
II *Loans granted by non-credit societies*	245	52	75	95	104	131	150	162	176	205
III *Loans granted by land mortgage banks*	46	52	62	69	77	84	91	92	111	186
IV *Total liabilities to cooperatives* (I+II+III)	849	702	833	954	1038	1168	1285	1472	1817	2275
V *Net increase in Individuals' liabilities to cooperatives* (△IV)	N A	—147	131	121	84	130	117	187	345	458

N A.=Not available

[a] Relates to agricultural year ending 30 June

Note The estimates of loans granted by cooperatives are net of inter-cooperative loans

Source *Statistical Statements Relating to the Cooperative Movement in India*, Reserve Bank of India, Bombay

CHAPTER 4

ESTIMATES OF CORPORATE SAVING

THE CORPORATE SECTOR in this study is represented by the non-Government corporations registered under the Indian Companies Act and all types of cooperatives operating in the country Corporations registered under the Indian Companies Act but owned or managed by the Government are excluded from the purview of this sector as they are treated as a part of the Government sector However, the Government financial corporations, which are quite few in number, could not be separated from the Corporate sector for want of usable data The branches of foreign companies operating in India are treated separately while the foreign controlled and foreign portfolio companies are included in the Corporate sector [1]

The financial corporations such as banks, insurance companies and loan and investment companies, the non-financial corporations—both public and private limited companies—and the cooperative credit and non credit societies are the types of institutions identified for the purpose of estimating Corporate saving and investment Separate estimates are made in each category from the respective financial statements which the National Council analysed

The Reserve Bank statistics on banking in India constitute the basic source for estimating saving and investment of banking companies The saving and investment of insurance companies can be estimated from the reports of the Controller of Insurance These published statistics suffer from the limitation of non comparability over time consequent on the changes in the classification adopted by them and incomplete coverage The National Council made necessary adjustments to overcome these shortcomings and derived the saving and investment estimates of such financial corporations

The National Council prepared a combined balance sheet and income-expenditure statement of all non-Government non-financial corporations

[1] The saving estimates of these companies are, however shown separately in the tables

on the basis of blow ups of data for sample corporations The Reserve Bank provides information in its monthly Bulletins on the finances of selected samples of public and private limited companies for a few years The National Council analysed the financial statements of selected samples of small companies for two years The data obtained from both the National Council and the Reserve Bank sample studies are utilized in constructing the combined balance sheet and income-expenditure account of all non Government non financial corporations

The Statistical Statements Relating to the Cooperative Movement in India, published annually by the Reserve Bank of India provided the necessary information on the different types of cooperative institutions operating in the country

Corporate saving, as already mentioned in Part I, can be estimated either from the combined income-expenditure accounts or balance sheet data of all corporations In the case of the income-expenditure account, saving is measured as the difference between current income and current expenditure adjusted for tax provisions, capital consumption allowances and capital gains or losses, while the net increase in all assets less net increase in all types of liabilities with similar adjustments constitutes saving as measured from the balance sheet Corporate saving in this study is estimated from the income expenditure statements except in the case of insurance companies, loan and investment companies and cooperatives Saving is identified with *retained earnings* as provided in the income expenditure statements or profit and loss and appropriation accounts The data on profit or loss together with reserves as reported in the balance sheets of the insurance companies are used to derive their saving The item of net profit or loss shown in the annual operating statements is taken as a measure of saving of the cooperatives The saving estimates of all loan and investment companies are obtained on the basis of the ratio of paid-up capital of such companies to that of the non-Government non financial companies

The balance sheet data on the asset holdings of various types of corporations are used to estimate Corporate investment Separate estimates are derived for investment in fixed assets (buildings, plant and machinery etc) and investment in inventories (raw materials, semi-finished and finished goods) Investment in land is excluded because it is not a component of economic investment However, investment in land could not be separated in the case of some financial corporations and cooperatives due to non-availability of data

The estimates of Corporate income are derived from the data given in the income-expenditure statements of the different types of corporations

Net investment or saving of various types of corporations is estimated from the data on gross investment or saving after deducting capital consumption allowances on the fixed assets The data on depreciation available in the balance sheets of these corporations are used for this purpose No distinction could be made between gross and net estimates in the case of insurance companies and cooperatives for want of data The data available on depreciation provision are assumed to represent actual depreciation while deriving net saving or investment of banking companies

Conceptually, all types of capital gains and losses whether realized or unrealized should be excluded from the estimates of Corporate saving or investment No adjustments are made in this study for such gains or losses with respect to fixed assets as revaluation of fixed assets is a rare phenomenon among corporations in India In the case of inventories however valuation adjustments are made to offset such gains or losses arising solely out of price variations This adjustment could however, be attempted only for the non-Government non-financial corporations although it might be mentioned that the financial corporations and cooperatives invest only negligible amounts in inventories and hence such adjustments would be relatively less important

The estimates of saving and investment of the branches of foreign companies operating in India and other foreign controlled and foreign portfolio companies are derived from the data published by the Reserve Bank in its *Surveys of India's Foreign Liabilities and Assets*

The procedures adopted in deriving the saving and investment estimates of the different types of corporations are described below in detail

Financial Corporations

The different types of institutions identified in this category are the banks, insurance companies and the loan and investment companies Separate estimates of saving and investment are made for each type

Banks

The banking statistics published by the Reserve Bank of India[1] provide

[1] *Statistical Tables Relating to Banks in India*

detailed information on the financial operations of various types of banking institutions in the country The published data disclose profits or losses, taxes paid, dividends distributed, investment in fixed assets etc, for all banking institutions classified as scheduled and non-scheduled banks and foreign banks The information contained in the published statements which relates to calendar years is adjusted to financial years and used to derive the corresponding estimates

Saving of banking companies is estimated from the data given in the income-expenditure statements and profit and loss and appropriation accounts of all banking companies The provision for taxes and dividends are deducted from the balance of net profits to derive the estimates of net saving The balance of profits less taxes is taken to constitute the income of all banking companies.

The balance sheet data on investment in land and buildings are taken to represent the net investment of all banking institutions in fixed assets No attempt is made to separate investment in land for want of reliable information Again, in the absence of any reliable information on depreciation, the data on depreciation provision are used to derive the net estimates.

Insurance Companies and Provident Societies

The Controller of Insurance publishes[1] annually the summary balance sheets as well as revenue accounts of all Indian insurance companies Separate accounts are given for the life and non-life parts of business transacted by the Indian insurance companies As regards non-Indian insurance companies transacting business in India, data are available on their total assets The data given in the balance sheets and revenue accounts of insurance companies in any year do not cover all insurance companies as some companies do not report in time Hence, the estimates are usually revised and the corrected figures are published in the subsequent year Such *corrected* figures are available in the case of Indian insurance companies only for the years 1951 to 1957 The corrected figures of individual items in the balance sheets and revenue accounts for other years are, therefore, derived from the published *uncorrected* figures by applying the average ratio of corrected to uncorrected figures for the years for which such data are available

[1] *Indian Insurance Year Book*

The estimates of saving and investment of the Indian insurance companies are derived from the data given in the combined balance sheet of all insurance companies after making necessary adjustments. The funds credited to the profit and loss account and the net increase in general reserves and other reserve funds as reported in the balance sheet are taken to represent saving of the insurance companies. Investment of insurance companies is estimated as the net increase in the total value of land and house property held by these companies. As already mentioned, no distinction is made between net and gross estimates as no usable data on depreciation are available. The saving and investment estimates thus derived are finally adjusted to financial years as the published data relate to calendar years.

In the case of the provident societies the data given in the summary balance sheets published in the Insurance Year Books are first adjusted to financial years and then used to derive their saving and investment estimates.

It may be noted that the data regarding Indian insurance companies in 1956 and 1957 relate only to their non-life business as the life business was taken over by the Life Insurance Corporation of India in 1956. The estimates of saving and investment of the Life Insurance Corporation of India are included in the Government sector under statutory corporations. To this extent the saving and investment of the insurance companies have gone down during 1956 and 1957 whereas those of the Government statutory corporations registered an increase, thus reflecting only an institutional change rather than a change in the saving behaviour of the community.

Loan and Investment Companies

Practically no information is available on the saving and investment of loan and investment companies. In the absence of any reliable indicator, the National Council attempted to estimate their saving and investment on the basis of their paid-up capital. The ratios of the paid-up capital of the loan and investment companies to that of the non-Government non-financial companies are applied to the saving and investment estimates of the latter to estimate saving and investment of the former.

The estimates of saving and investment of all financial corporations are given in Table 4.11.

TABLE 4.1.1

SAVING AND INVESTMENT OF FINANCIAL CORPORATIONS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Saving*										
1 Gross	N A	53	58	65	60	62	69	85	108	101
2 Net	40	43	46	52	47	49	54	67	90	78
II *Investment*										
1 Gross	N A	30	38	32	38	41	53	54	20	77
2 Net	N A	20	26	19	25	28	38	36	2	54
III *Income*	76	79	87	98	94	98	107	130	154	154

N A =Not available

Sources (1) *Statistical Tables Relating to Banks in India*, Reserve Bank of India, Bombay
(2) *Indian Insurance Year Book*, Controller of Insurance, Simla

NON-GOVERNMENT NON-FINANCIAL CORPORATIONS

The saving and investment estimates of all non-Government non-financial corporations are derived from the combined balance sheet and income-expenditure statement of all such companies which the National Council prepared on the basis of sample studies of company finances. The sample data are obtained from the National Council analysis of the financial statements of small public and private corporations and the Reserve Bank analysis of company finances.

The Reserve Bank analysed the balance sheets and income-expenditure statements of 750 large public limited companies for the period 1950 to 1955. The sample size was later increased to 1001 companies for the years 1955 to 1958. The analysis was extended to a sample of 333 large private limited companies for the years 1956 and 1957. The findings of all these sample studies are published in the Bank's monthly bulletins.[1]

The National Council analysed the finances of samples of small companies to supplement the Reserve Bank data and arrived at more precise estimates of saving and investment of all non-Government non-financial corporations. The sample was confined to 119 small public limited companies and 150 small private limited companies for the years 1955 and 1956. The particulars regarding sample frame and design and the concepts and definitions adopted in the analysis are discussed below.

The National Council analysis of company finances relates to small public limited companies with paid-up capital less than Rs. 500,000 and small private limited companies with paid-up capital less than Rs. 1,000,000. The sample companies were selected from the list of all joint stock companies registered in India upto 31 March 1957 obtained from the reports of the Department of Company Law Administration. These reports give alphabetical lists of all joint stock companies registered in India, their authorized, subscribed and paid-up capitals, date of registration, industrial classification, etc. The alphabetical list of companies includes financial and non-financial companies as well as Government registered companies. The Government registered companies and also the financial corporations were eliminated as the analysis made in this study did not relate to such corporations. Further, quite a large number of companies in the list mentioned above may not be actually functioning as the rate of mortality is high among small companies. Thus the proportion of

[1] *Reserve Bank of India Bulletins*, September 1957, August and November 1959, March and November 1960, Bombay.

deletion during the selection of small companies from the above list was estimated to be of the order of 3 in 4. It was, therefore, found necessary to first select the number of companies from the list four times as large as the sample size out of which all companies not relevant for the purpose of this study were deleted.

This being a pilot study no strict probability sampling procedure was adopted. However, the selection of companies was made in such a way as to obtain a representative sample of small public and small private limited companies. To start with, in each case the average number of companies (N) listed on a single page in the reports mentioned above is estimated. Next, two independent random numbers m and n are selected from 1 to [N/2] and then every mth company from the top and nth company from the bottom are selected from each page. Thus altogether samples of public and private limited companies of sizes equivalent to double the number of pages containing the corresponding lists were selected.

All companies selected in the above manner were listed and information regarding their paid up capital, accounting period, the number of years for which the financial accounts were available etc., was recorded. Out of these, the companies falling in any one of the following categories are excluded:

(i) Companies having paid up capital of Rs. 500,000 or more in the case of public limited companies and Rs. 1,000,000 or more in the case of private limited companies.

(ii) Government registered companies and financial corporations.

(iii) Companies for which the financial statements were not available with the Department of Company Law Administration for the years 1955 and 1956.

Finally, after all the deletions, 119 public and 133 private limited companies were obtained for detailed analysis of their financial statements. However, in the case of private limited companies, 17 more companies were added to make the sample size equal to 150 small private companies.

The basic objective of the National Council analysis of company finances being the evaluation of the differential financial structure and operation of small and large companies especially with respect to their saving and investment behaviour, it became necessary to conduct this study on parallel lines to that of the Reserve Bank. As such, almost all the procedural details formulated by the Bank are adopted by the National Council. Thus the annual accounts of all companies whose accounting

period ended any time between 1 July and 30 June are added and the combined statement is taken to be representative of the preceding calendar year. The final results of these studies are also presented in a similar proforma as used by the Reserve Bank. It may be mentioned here that the classification of the items of balance sheets and income-expenditure accounts as adopted by the Reserve Bank for the analysis of 750 large public companies for 1950 to 1955 is more detailed than the one employed for 1001 large public companies or 333 large private companies for the years 1955, 1956 and 1957. The former classification is adjusted according to the latter in order to derive a comparable time series for the entire period. The latest classification as adopted by the Reserve Bank is used for the National Council analysis for the small company sector.

All the relevant data on samples of different categories of non-Government non-financial corporations of the Reserve Bank of India (RBI) and the National Council (NCAER) are summarized in the two statements—balance sheet and income-expenditure account. These statements are available for the following samples:

(i) RBI sample of 750 large public companies for the years 1950 to 1955

(ii) RBI sample of 1001 large public companies for the years 1955 to 1957

(iii) RBI sample of 333 large private companies for the years 1955 to 1957

(iv) RBI sample of 501 small public companies for the years 1956 and 1957

(v) NCAER sample of 119 small public companies for the years 1955 and 1956

(vi) NCAER sample of 150 small private companies for the years 1955 and 1956

The balance sheets and income-expenditure accounts of the different samples of non-Government non-financial corporations are blown up separately on the basis of their total paid-up capital so as to represent all large as well as small public and private limited companies. The total paid-up capital series of all non-financial corporations classified according to public and private limited companies as provided by the Department of Company Law Administration (CLA) is used for this purpose after suitable adjustments. From this series are deducted the estimates of paid-up capital of all Government registered companies to arrive at the total paid-up capital series of all non-Government non-financial corporations. Separate data regarding the paid-up capital of

large and small companies are available only for the year 1950-51 as published by the Taxation Enquiry Commission and for the year 1956-57 as given by the CLA. The CLA estimates of the total paid-up capital of all non-financial corporations in other years are, therefore, split up into its components relating to large and small companies by using appropriate ratios on the basis of the available information. The estimates of total paid-up capital of all non-Government non-financial corporations as arrived at for different categories, viz., (a) large public (b) large private (c) small public and (d) small private, are used to blow up the corresponding sample data on saving, investment etc.

The paid up capital series as obtained from the CLA and used for purposes of blow-up are as on 31 March of every year. On the other hand, the sample data do not relate to any single point of time. In fact the accounting period for all the sample companies ends anywhere between 1 July of the reference year to 30 June of the following year. The combined balance sheets of the sample companies are taken uniformly to represent the position as on 31 December of each year and the corresponding income-expenditure accounts are assumed to relate to the period of 12 months from January to December. This assumption has been made in view of the fact that a large number of the sample companies have their accounting period ending 31 December. The sample accounts are adjusted to financial years on the basis of this assumption before blowing them up to the companies in the population.

An alternative method was also examined for the purpose of arriving at the aggregate estimates in making a proper adjustment for the accounting period. The sample accounts as available were directly blown up using the ratio of paid-up capital of the sample companies to the corresponding paid-up capital of all companies as on 31 March of every year and the results interpreted as representing the operation of all companies for the financial years. This method, however, did not give satisfactory results and hence was rejected.

It may be mentioned here that the RBI analysis of the finances of 501 small public companies for the year 1956 compares favourably with the NCAER analysis for 119 small public companies for this year. It was, therefore, decided to use the Reserve Bank analysis for the year 1956 which is based on a larger sample.

For the year 1955, two alternative sets of estimates are available—one based on the sample of 750 companies and the other on a sample of 1001 companies. The blown-up estimates for all the large public companies as obtained from the two samples differ significantly from each

other As such, both the sets of blow-ups are obtained and used for estimating the corresponding saving, investment and other aggregates Corporate investment, represented by the difference between the balance sheet items for any two years, is estimated for large public companies for the year 1955-56 by using the blown-up data of 750 companies while the corresponding data for 1001 companies are used for the year 1956 57 The saving and income for the year 1955-56 are, however, estimated directly from the blown-up data on income expenditure statement of 1001 companies

The estimates of saving, investment and other aggregates in the case of large private limited companies are obtained by the National Council, for the years for which no direct sample blow-ups are available, by applying appropriate ratios based on the corresponding paid-up capital series for the entire period The actual method of estimation is as follows

Step 1

The average percentage ratios of "large private to large public" companies for the three years 1955-56, 1956-57 and 1957-58 are calculated separately for all the items in the balance sheet and also for those items of the income-expenditure account required for the estimation of saving of the Corporate sector

Step 2

An index is constructed to indicate the relative growth of all large private companies as compared with the large public companies For this purpose, the percentage ratios of the paid-up capital of all large private companies to the paid-up capital of large public companies for all the years (1950-51 to 1957-58) are calculated and these are converted into index numbers with base as the corresponding average ratio for 1955-56 to 1957-58

Step 3

The indices as obtained in *Step 2* are applied to the average percentage ratios of large private to large public companies for the years 1955-56 and 1957-58 as calculated in *Step 1* for each one of the balance sheet (or income expenditure account) items in order to arrive at the corresponding percentage ratios for the other years

Step 4

The percentage ratios for the years 1950 51 to 1955-56 as calculated in

the above manner are then applied to corresponding blown-up balance sheet (or income-expenditure account) data of all large public limited companies Thus a complete balance sheet (or income-expenditure account) of all large private limited companies for the period 1950 51 to 1954-55 is constructed

A similar procedure is adopted to estimate the accounts for other years for small public and small private limited companies (for which no sample blow-ups are available) by relating them to the corresponding large company sector In this case, however, separate indices are constructed for public and private limited companies by using the corresponding paid-up capital series for large and small public companies and large and small private companies

The accounts of all public and private limited companies for the years 1948-49 and 1949-50 are estimated on the basis of the accounts for the year 1950-51 by using the ratios of paid-up capital for these years

The estimates of saving, investment and income of all non-Government non-financial corporations are derived from the combined balance sheet and income-expenditure statement, prepared in the manner described above, for all large and small public and private limited companies Saving is identified with the *retained profits* in the income-expenditure account while the item *profits after tax* is taken to represent Corporate income Investment in physical assets and inventories is measured from the balance sheet data as year-to year changes in the level figures Buildings, plant and machinery and other assets are the items considered under fixed assets while inventory investment is comprised of raw materials, finished goods and work-in-progress and other stocks and stores

Inventory Valuation Adjustment

This adjustment represents the most important single step necessary to conform investment and saving estimates derived from income expenditure statements (or balance sheet data) to their basic theoretical concepts The purpose of the adjustment is to eliminate valuation changes in the estimates of corporate inventory investment derived as differences in the level of assets like stocks and stores as given in the balance sheets It may be noted that a company may adopt either the first-in-first-out (FIFO) or the last-in-first-out (LIFO) method or a variant of the two in valuing its inventories The distinction between the two methods can be clearly brought out by considering the following example

Consider a company which has, say 1000 units of inventories originally

valued at 50 nP each Thus the initial value of inventories as reported in the balance sheet is Rs 500 During the course of the year the company buys another 1000 units of inventories at Re 1 each thus making an investment during the year of Rs 1,000 in real terms At the same time it consumes or sells 1000 units at Re 1 each during the same year Therefore, at the end of the year only 1000 units are left with the company Now according to the FIFO method, the total value of inventories at the end of the year is Rs 1,000 since those which were acquired initially at 50 nP each are consumed or sold out (first-in-first out) On the other hand, the LIFO method fixes the total value of inventories at Rs 500 since those which are bought during the year at Re 1 each are consumed or sold out first Thus, while deriving the estimates of investment in inventories from the balance sheet two estimates are obtained —Rs 500 according to FIFO (=1000 minus 500) and zero according to LIFO (=500 minus 500) But in reality during the year the company has bought 1000 units and at the same time sold or consumed 1000 units of inventories thereby making no investment in real terms The magnitudes of the valuation adjustment in this example will be zero according to the LIFO method (since the investment in inventories as shown in balance sheet will be zero) and Rs 500 according to the FIFO method which actually represents the reported business profits or a capital gain realized during the year The saving which is measured as reported retained corporate profits and the reported corporate income will have to be adjusted in the same manner and by the same amount as corporate inventory investment In general, the inventory valuation adjustment should be either subtracted or added to the Corporate Saving, investment and income accordingly as it represents inventory profits—a capital gain or inventory losses—a capital loss

As regards the general business practice of inventory valuation in India, it may be pointed out that the method of valuation depends on the nature of the industry and the commodity It is understood that FIFO method is generally used by the majority of the corporations

With a view to eliminating inventory profits or losses due to changes in prices, efforts are made in this study to adjust the book value of inventories of non-Government non-financial corporations to obtain economically meaningful inventory investment and saving data The basic procedure adopted can be summarized as follows

(1) Translation of book values of inventories into 1952-53 prices by

means of average monthly wholesale price indices as published by the Office of the Economic Adviser[1]

(ii) Conversion of the first differences of year end inventories at 1952-53 prices as derived in the first step into current prices by multiplying by the annual average wholesale price indices

(iii) Subtraction of the annual change in inventory in current prices as obtained in (ii) from the annual change in the year-end book value of inventories The difference, with the appropriate sign, is the measure of the necessary inventory valuation adjustment or inventory profit or loss

For translating book value of inventories into 1952-53 prices, it was found necessary to decide the time lag reflected in the prices used for arriving at book value of the three items of inventories, viz, (a) raw materials, (b) finished goods and work-in-progress, and (c) stores The time lag was estimated by taking into consideration the turnover of each item of inventories which in its turn might depend upon whether the company is large or small Considering the turnover figures for various categories of companies obtained through a detailed analysis of the financial accounts of the samples of companies previously described, it was decided to use one month lag for the three items of inventories

The inventory valuation adjustment is calculated on the basis of the RBI analysis of 750 and 1001 large public limited companies, which gives data regarding the different types of inventories held by these corporations on a comparable basis for all the years 1950 through 1958 It may be noted here that the findings of the RBI analysis for large private limited companies or the NCAER analysis for the small company sector are not used for estimating inventory valuation adjustment as these relate only to a few years In the case of the RBI analysis of large public limited companies also, no data are available regarding inventories for the year 1948 and 1949 These are estimated by using the ratios of paid-up capital of large public companies for the years 1948 and 1949 to the paid up capital of 1950 The estimate of inventories of the samples of large public companies are taken to correspond to calendar year figures as the largest number of companies in the sample analysis close their accounts in the quarter October-December The average of the wholesale monthly price indices for the months of September, October and November are used to translate the book values of inventories into 1952-53 prices

[1] *Index Numbers of Wholesale Prices in India*, Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India,

The wholesale price indices for industrial raw materials, semi-manufactures and manufactures and machinery and transport equipment are used for calculating inventory valuation on raw materials, finished goods and work-in-progress and stores respectively. The estimates of inventory valuation adjustment (IVA) for different items of inventories are added together and adjusted to financial years. The IVA estimates thus derived for the sample companies are blown-up to represent the corresponding IVA for all non-Government non-financial corporations. The ratio of the book value of inventories of non Government non-financial corporations to the book value of inventories of sample companies is used for this purpose.

The estimates of saving, investment and income, both before and after inventory valuation adjustment of all non-Government non-financial corporations are presented in Tables 4 2 1 to 4 2 3.

Cooperatives

Data on the financial structure of the different types of cooperative institutions operating in the country are available in the annual statements on the Cooperative Movement in India published by the Reserve Bank.[1] Detailed information is available for each type of society on the various items of assets and liabilities, loans advanced and investments made during the year, magnitudes of income, expenditures incurred, the annual profits accrued or losses incurred etc., in these publications but a complete balance sheet or income-expenditure statement is lacking. The classification of items adopted also varies over the period.

The National Council therefore undertook a detailed investigation of all the available data in this connection and constructed combined financial statements for different types of cooperatives by adopting uniform classification. The different types of cooperative institutions are classified into two categories, viz., credit societies, non-credit societies and the saving and investment estimates of each category are derived separately from the corresponding financial statements.

The figures of net profit or loss given in the financial statements are taken to represent the net saving as also the income of the various types of cooperatives. Investment in land and buildings as well as plant and machinery is added to the inventory investment represented by the net increase in the value of stocks held at the end of the year to derive the investment estimates of the cooperatives. Investment in land could

[1] *Statistical Statements relating to the Cooperative Movement in India.*

TABLE 4 2 1

SAVING AND INVESTMENT OF NON-GOVERNMENT NON-FINANCIAL CORPORATIONS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Saving before IVA*										
1 Gross	N A	657	551	1023	644	602	899	1022	797	786
2 Net	285	73	264	327	132	220	321	417	307	121
II *Investment before IVA*										
1 Gross	N A	1930	994	2330	736	663	1576	2319	2866	2846
2 Net	N A	1346	707	1634	224	281	998	1714	2376	2181
III *Inventory Valuation Adjustment*	N A	—279	—222	—238	402	23	120	—225	—439	—76
IV *Saving after IVA* (I+III)										
1 Gross	N A	378	329	785	1046	625	1019	797	358	710
2 Net	N A	—206	42	89	534	243	441	192	—132	45
V *Investment after IVA* (II+III)										
1 Gross	N A	1651	772	2092	1138	686	1696	2094	2427	2770
2 Net	N A	1067	485	1396	626	304	1118	1489	1937	2105
VI *Corporate Income after taxes*										
1 Before IVA	646	424	696	822	592	725	895	1065	958	768
2 After IVA [VI(1)+III]	N A	145	474	584	994	748	1015	840	519	692

N A =Not available

Sources Items I and VI (I) Table 4 2 2
Item II Table 4 2 3

TABLE 422

RETAINED PROFITS OF NON-GOVERNMENT NON-FINANCIAL CORPORATIONS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I **Retained profits**	**285**	**73**	**264**	**327**	**132**	**220**	**321**	**417**	**307**	**121**
1 *Public limited companies*	*253*	*65*	*231*	*285*	*115*	*186*	*274*	*351*	*266*	*106*
(i) Large	230	60	213	265	108	176	262	327	267	127
(ii) Small	23	5	18	20	7	10	12	24	—1	—21
2 *Private limited companies*	*32*	*8*	*33*	*42*	*17*	*34*	*47*	*66*	*41*	*15*
(i) Large	25	6	26	34	14	28	39	54	35	12
(ii) Small	7	2	7	8	3	6	8	12	6	3
II **Profits after tax**	**646**	**424**	**696**	**822**	**592**	**725**	**895**	**1065**	**958**	**768**
1 *Public limited companies*	*539*	*353*	*567*	*667*	*478*	*560*	*710*	*844*	*769*	*604*
(i) Large	481	318	516	613	443	524	671	791	747	601
(ii) Small	58	35	51	54	35	36	39	53	22	3
2 *Private limited companies*	*107*	*71*	*129*	*155*	*114*	*165*	*185*	*221*	*189*	*164*
(i) Large	65	44	81	99	75	110	126	146	133	108
(ii) Small	42	27	48	56	39	55	59	75	56	56

Source NCAER analysis of finances of non-Government non-financial corporations

TABLE 4.23

INVESTMENT IN FIXED ASSETS AND INVENTORIES OF NON-GOVERNMENT NON-FINANCIAL CORPORATIONS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Gross investment in fixed assets	N A	*1147*	*557*	*1109*	*954*	*731*	*1326*	*1628*	*1604*	*2293*
1 Buildings	N A	296	148	260	196	149	231	267	217	253
2 Plant and machinery	N A	701	335	702	588	485	989	1178	1217	1807
3 Other fixed assets	N A	150	74	147	170	97	106	183	170	233
II Depreciation	N A	*584*	*287*	*696*	*512*	*382*	*578*	*605*	*490*	*665*
III Net investment in fixed assets (I—II)	N A	*563*	*270*	*413*	*442*	*349*	*748*	*1023*	*1114*	*1628*
IV Investment in inventories	N A	*783*	*437*	*1221*	*—218*	*—68*	*250*	*691*	*1262*	*553*
1 Raw materials	N A	213	113	263	—240	—101	82	270	178	32
2 Finished goods and work-in-progress	N A	411	244	807	9	68	122	278	834	245
3 Other stocks and stores	N A	159	80	151	13	—35	46	143	250	276

N A =Not available

Source NCAER analysis of finances of non-Government non-financial corporations

not be separated for want of detailed information. Again no distinction is made between gross and net estimates of saving or investment as no usable data on depreciation are available.

Table 4.3.1 presents the saving and investment estimates of all cooperative institutions operating in the country. The data suggest that the amounts involved are not substantial. The series shows wide fluctuations during the period under study.

Foreign Branches

The saving and investment estimates of foreign branches are derived by the National Council from the data published by the Reserve Bank of India in its surveys of India's Foreign Liabilities and Assets. The estimates are presented in Table 4.4.1.

Aggregate Estimates

A comparison of the saving estimates of the National Council and the Reserve Bank is given in Table 4.5.1. It should be noted that the NCAER estimates are before inventory valuation adjustment so that they can be directly compared with the Reserve Bank estimates. The differences between the two estimates are significant for the years 1951-52 and 1952-53 which can somewhat be reduced if the data for the two years are taken together. The Bank estimates for the years 1954-55 to 1956-57 appear to be substantially at a higher level as compared to the National Council estimates.

TABLE 4.31

SAVING AND INVESTMENT OF COOPERATIVES, 1948-49 TO 1957-58[a]

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Saving	*63*	*40*	*70*	*53*	*22*	*17*	*27*	*63*	*86*	*84*
1 Credit societies[b]	49	23	27	31	27	30	33	43	57	65
2 Non-credit societies	14	17	43	22	—5	—13	—6	20	29	19
II Investment[c]	N A	N A	*113*	*46*	*14*	*8*	*27*	*87*	*185*	*162*
1 Credit societies[b]	N A	N A	3	2	1	5	2	4	17	9
2 Non-credit societies	N A	N A	110	44	13	3	25	83	168	153

[a]Relate to agricultural year ending 30 June
[b]Include also cooperative grain banks and central and primary land mortgage banks
[c]Includes investment in land and investment in inventories of non-credit societies only
N A =Not available
Source *Statistical Statements Relating to the Cooperative Movement in India*, Reserve Bank of India, Bombay

TABLE 441

SAVING AND INVESTMENT OF FOREIGN BRANCHES,[a] 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I Saving (Retained Earnings)	82	82	82	82	84	110	113	12	119	60
II Investment (Direct Investment in kind from abroad)	155	155	155	155	155	136	77	79	92	114

[a] Excludes branches of foreign banking companies

Source *Survey of India's Foreign Liabilities and Assets*, Reserve Bank of India, Bombay

TABLE 4 51

ESTIMATES OF CORPORATE NET SAVING[a] BY THE NCAER AND THE RESERVE BANK, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I. NCAER estimate	388	156	380	432	201	286	402	547	483	283
II Reserve Bank estimate	N A	N A	394	699	91	285	494	720	686	255

N A =Not available
[a] Before inventory valuation adjustment

CHAPTER 5

ESTIMATES OF GOVERNMENT SAVING

THE CENTRAL and State Governments, the Local Authorities, the Government Statutory Corporations and the Government Registered Companies form the different segments of the Government sector as defined for the purposes of this study For these bodies the estimates are separately derived and then aggregated to arrive at the total saving and investment attributable to the Government sector

PUBLIC AUTHORITIES

The best way to derive saving and investment estimates of the public authorities is to construct a complete statement showing Government expenditures by economically meaningful categories This process of reconstructing Government accounts is known as *economic classification* of Government accounts The Ministry of Finance, Government of India, has undertaken in recent years a complete and comprehensive analysis of Central Government accounts adopting concepts applicable to economic classification Attempts are also made by the Ministry to extend economic classification to the finances of the State Governments

Further some research organizations and individuals have also been attempting to reconstruct the Government accounts The National Council has combined the economic classification with the *functional classification* and has completed analysis of Government accounts for one year[1] The efforts of various organization in this direction will give researchers better knowledge of the financial operations of the Government at a later stage However, as at this time, the most comprehensive source from which fairly reliable estimates of Government saving and investment can be obtained and which will conform to economic concepts as far as possible is provided by the work of the Central Statistical Organisation in this field

[1] *Economic-Functional Classification of Central and State Government Budgets, 1957-58,* National Council of Applied Economic Research, New Delhi, 1960

The National Income Unit (NIU) of the Central Statistical Organisation has been analysing the budget statements of the Central and State Governments as well as the annual reports of the Local Authorities in order to assess the role of Government's share in national income and expenditure. This analysis provides information separately on the current and capital transactions of the administrative departments and departmental commercial undertakings of all public authorities for the period 1948-49 through 1957-58.[1] The current accounts of public authorities give fairly detailed breakdowns of revenue and expenditure but such details are not available in the capital accounts. Also, no distinction is made on the revenue side of the capital account between administrative departments and departmental commercial enterprises. The Central Statistical Organisation, however, published recently details regarding fixed capital formation, investment in inventories and the maintenance expenditure of the Central and State Governments as well as the Local Authorities.[2] An independent analysis giving the breakdowns of gross capital formation in the public sector was also made by Dr S. G. Tiwari in a paper submitted to the Second Indian Conference on Research in National Income.[3]

The data as available in the NIU reports no doubt suffer from a serious drawback in view of the fact that wherever sufficient details are not available certain ratios are used for estimation. The coverage for Local Authorities in particular is not complete as data in most of these cases are not available in detail and the corresponding estimates as included in the above reports are suspect in this respect. In spite of such limitations the NIU analysis is preferred in this study as the data available in other sources are not comprehensive enough to provide a uniform basis for economic classification of the financial operations of all public authorities.

The saving estimates of the public authorities are derived separately for administrative departments and departmental commercial enterprises from their respective current accounts as given in the NIU reports. The

[1] *Estimates of National Income*, Central Statistical Organisation, Cabinet Secretariat, Government of India.

[2] "Gross Capital Formation of Public Authorities", *Monthly Abstract of Statistics*, Central Statistical Organisation, Cabinet Secretariat, Government of India.

[3] Dr S. G. Tiwari, "Gross Capital Formation in the Public Sector in India from 1952-53 to 1957-58", Paper submitted to the Second Indian Conference on Research in National Income, September 1960 (unpublished).

investment estimates, on the other hand, are obtained from the capital account of public authorities

The calculation of depreciation on capitalizable assets of the Government poses a problem as no reliable data are available The NIU analysis provides information on maintenance expenditure of all public authorities and the provision for maintenance and depreciation on capital assets of departmental commercial enterprises only The estimates of maintenance expenditure as given in the capital account of public authorities relate mostly to capital expenditures on renewals and replacements These estimates, after certain adjustments as discussed below, are assumed to represent depreciation incurred on all fixed assets of the Government This assumption may not be entirely justified but there exists no better alternative

The differential treatment of depreciation provision and maintenance expenditure also poses a conceptual problem while deriving the gross and net estimates of saving and investment of public authorities. The net saving of public authorities can be measured as net surplus on current account after providing for depreciation and maintenance while the gross estimate can be derived from net saving by adding the maintenance expenditure Alternatively the surplus of current income over current expenditure, the latter *excluding* the provision for depreciation and maintenance, can also be taken as a measure of gross saving from which the maintenance expenditure could be deducted to arrive at net saving The distinction between the two methods lies in the fact that the provision made for depreciation and maintenance differs from the depreciation actually incurred on fixed assets However, in the case of administrative departments no such distinction is possible as data on only the maintenance expenditure are available Consequently, the latter method has been uniformly adopted in this study to estimate saving of all public authorities

Certain adjustments are, however, made in the current and capital accounts of public authorities as given in the NIU analysis, before utilizing them to estimate saving and investment The capital expenditures of public authorities are grouped in the NIU reports under two heads, viz., *outlay* and *maintenance* The former relates to new outlay while the latter represents all capital expenditures on renewals and replacements as also current repairs and maintenance Conceptually such current expenditures on repairs and maintenance should be excluded from the capital account In the case of the commercial enterprises there is no problem as the reported maintenance expenditure relates only to renewals

and replacements whereas in the case of the administrative departments current costs are also included and hence the reported figures of maintenance are to be suitably adjusted. It is, therefore, assumed on the basis of the information supplied by Dr. Tiwari in his paper that only two thirds of the maintenance expenditure of the administrative departments given in the capital account of public authorities represent actual renewals and replacements, the remaining one-third being treated as current expenditure and hence transferred to the current account. The estimates of outlay as given in the capital account of public authorities are taken to represent the net investment of administrative departments and departmental enterprises and the maintenance expenditure as adjusted above is added to derive the estimates of gross investment. It may be pointed out here that inventory investment in policy stocks of raw materials is not included in the estimates of investment of public authorities.

Again, the current account of the administrative departments includes on its revenue side the operating surplus transferred from the current account of the departmental commercial enterprises. This surplus is in fact an item of saving of the departmental enterprises and hence the current accounts of the administrative departments and departmental enterprises as given in the NIU reports are suitably adjusted for this transfer item and saving of the administration is measured net of the operating surplus of the enterprises.

The estimates of Government draft on private income as given in the NIU analysis are taken to represent the income of all public authorities.

The data on saving, investment and income of public authorities are given in Tables 5.1.1 to 5.1.3.

Government Corporations

The Government statutory corporations and the Government registered companies have assumed considerable importance during the post-independence period. The Reserve Bank, the State Bank, the Life Insurance Corporation, the Industrial Finance Corporation and the State Financial Corporations are the statutory financial corporations identified in this study. The estimates of the non-financial statutory corporations relate only to two corporations, viz., the Air India International and the Indian Airlines Corporation, as no reliable information is available on the other corporations but the omissions are not likely to be significant. The Government registered companies are the companies registered under the

TABLE 5.1.1

SAVING AND INVESTMENT OF ALL PUBLIC AUTHORITIES, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Saving*										
1 Gross	30	1460	1800	2650	1560	1340	1550	1730	2260	2280
2 Net	—350	900	1270	2010	840	640	750	920	1370	1080
II *Investment*										
1 Gross	2000	2580	2570	2840	2890	3290	4140	5510	6680	8150
2 Net	1620	2020	2040	2200	2170	2590	3340	4700	5790	6950
III *Income*	9860	10490	11380	12820	12020	12250	13090	14360	17330	18410

Sources Item I Table 5.1.2
Item II Table 5.1.3
Item III *Estimates of National Income*, Central Statistical Organisation, Cabinet Secretariat, Government of India

TABLE 5 12

SURPLUS ON CURRENT ACCOUNT OF ALL PUBLIC AUTHORITIES, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Total current revenue*	*9860*	*10490*	*11380*	*12820*	*12020*	*12250*	*13090*	*14360*	*16330*	*18410*
1 Administrative departments[a]	6690	6920	7590	8640	8030	8130	8660	9470	10880	12570
2 Departmental commercial enterprises	3170	3570	3790	4180	3990	4120	4430	4890	5450	5840
II *Total current expenditure*	*9830*	*9030*	*9580*	*10170*	*10460*	*10910*	*11540*	*12630*	*14070*	*16130*
1 Administrative departments[b]	7220	6280	6690	7000	7250	7480	7900	8720	9750	11370
2 Departmental commercial enterprises[c]	2610	2750	2890	3170	3210	3430	3640	3910	4320	4760
III *Surplus on current account or gross saving*(I—II)	*30*	*1460*	*1800*	*2650*	*1560*	*1340*	*1550*	*1730*	*2260*	*2280*
1 Administrative departments	—530	640	900	1640	780	650	760	750	1130	1200
2 Departmental commercial enterprises	560	820	900	1010	780	690	790	980	1130	1080

[a]Excludes the operating surplus of the departmental commercial enterprises transferred to administration account
[b]Includes 1/3 of the maintenance expenditure as given in the capital account and assumed to be of current nature
[c]Does not include the provision for maintenance and depreciation
Source *Estimates of National Income*, Central Statistical Organisation, Cabinet Secretariat, Government of India

TABLE 513

CAPITAL FORMATION OF ALL PUBLIC AUTHORITIES, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I *Net capital outlay*	*1620*	*2020*	*2040*	*2200*	*2170*	*2590*	*3340*	*4700*	*5790*	*6950*
1 Administrative departments	700	870	710	730	760	960	1160	1770	1770	1770
2 Departmental commercial enterprises	920	1150	1330	1470	1410	1630	2180	2930	4020	5180
II *Maintenance*	*380*	*560*	*530*	*640*	*720*	*700*	*800*	*810*	*890*	*1200*
1 Administrative departments[a]	170	200	210	220	270	270	290	280	330	330
2 Departmental commercial enterprises	210	360	320	420	450	430	510	530	560	870
III *Gross capital formation* (I+II)	*2000*	*2580*	*2570*	*2840*	*2890*	*3290*	*4140*	*5510*	*6680*	*8150*
1 Administrative departments	870	1070	920	950	1030	1230	1450	2050	2100	2100
2 Departmental commercial enterprises	1130	1510	1650	1890	1860	2060	2690	3460	4580	6050

[a] Represents only 2/3 of the reported figures, the remaining 1/3 being assumed to be expenditure on minor repairs and maintenance and transferred to current account

Source *Estimates of National Income*, Central Statistical Organisation, Cabinet Secretariat, Government of India

Indian Companies Act but owned and managed by the Government, these comprise both financial and non-financial concerns The estimates of saving and investment presented under this category relate only to the non-financial companies while the estimates of the financial companies (which are two in number) are merged with those of the non-Government financial corporations presented in Chapter 4

Saving and investment of the statutory corporations and the Government registered companies are estimated from their balance sheets or income expenditure statements For the statutory corporations the information contained in the banking statistics published by the Reserve Bank and Dr S G Tiwari's study of the capital formation in the public sector are used to supplement the data obtained from their financial statements

The National Council undertook a comprehensive analysis of the finances of almost all Government non-financial companies for the ten year period, 1948-49 through 1957-58 The concepts and techniques adopted in this analysis of the balance sheets and income-expenditure statements of Government companies are the same as those adopted for the National Council analysis of the finances of small companies discussed in the previous chapter The combined balance sheet and income-expenditure statement of all Government registered non-financial companies prepared on the basis of this analysis provided the basic information on saving and investment of these companies In this connection, it may be mentioned that most of the Government companies adopted the fiscal year as the accounting period and no adjustments are attempted in those cases where the accounting period is different

Net saving in all cases is identified with retained earnings as derived from the income-expenditure statement while gross saving is derived by adding depreciation to net saving Investment is estimated from the balance sheet data and is comprised of investment in buildings, plant and machinery and other fixed assets as well as inventories The estimates of depreciation are also obtained from the financial statements Where no data on depreciation are available, as is the case with the statutory financial corporations, no distinction is made between the net and gross estimates

The estimates of total saving and investment of all Government corporations are presented in Table 5 2 1

TABLE 5.21

SAVING AND INVESTMENT OF GOVERNMENT CORPORATIONS, 1948-49 TO 1957-58

(In million rupees)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
I. Saving										
1 Gross	97	103	96	84	144	211	244	262	385	424
2 Net	93	98	88	79	119	170	207	208	293	338
II Investment										
1 Gross	9	10	62	16	315	186	125	253	380	1084
2 Net	5	5	54	11	290	145	88	199	288	998

Source NCAER analysis of financial statements of Government registered companies and statutory financial and non-financial corporations

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